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Op01

Gender Inequalities In Colorectal Cancer Screening Among People Living With Severe Obesity: Findings From A Large Canada-Wide Population Study

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Background And Purpose

Worldwide, Colorectal Cancer (Crc) Is Among The Top Three Most Commonly Diagnosed Cancers And The Second Leading Cause Of Cancer Death. Timely Crc Screening Is An Essential Part Of Preventive Continuum Of Care. Obesity Is A Proven Crc Risk Factor (Rf) And There Is Dose-Response Relationship Between Increases In Crc Risk And Bodyweight. Our Study Aimed To Appraise The Association Between Severe Obesity And Crc Screening Aspects Considering Other Important Contributors.

Methods

Data Were Obtained From Seven Cycles Of The Canadian Community Health Survey (Cchs2005–Cchs2017-18). In Canada, Crc Screening Is Recommended For 50-74 Y.O. Utilizing Fecal Occult Blood Test Q2years Or Sigmoidoscopy Q10years. Crc Screening Aspects Were Assessed By Questions Regarding Having Fobt/Sigmoidoscopy/Colonoscopy And Timelines. Logistic Regression Was Used To Determine Associations.

Results

Data From 326,343 (50-74 Y.O.; 177,004 Females) Cchs Participants Were Included. Among Individuals With ≥ 1 rf (Physical Inactivity, Low Fruits/Vegetable Consumption, Alcohol Use, Smoking), Screening Rates Were Significantly Higher Compared To Those Without Rfs (65.1% Vs. 51.7%; $P < 0.001$), And They Were 1.7 Times More Likely To Be Screened (Or1.74; Ci95%1.71-1.77). However, People With Severe Obesity Exhibited Less Difference In Screening Rates (68.9% Vs. 64.9%; $P < 0.001$), And Likelihood Of Being Screened Was Lower (Or1.20; Ci95%1.19-1.20). Severe Obesity Was Strongly Independently Associated With Not Meeting Recommended Screening Interval (Rsi) In Females (Or1.13; Ci95%1.12-1.13) With No Association Observed In Males (Or0.99; Ci95%0.99-1.00); While Presence Of ≥ 1 rf Was Strongly Associated With Meeting Rsi In Both Females (Or1.74; Ci95%1.68-1.79) And Males (Or2.06; Ci95%1.96-2.17). After Adjusting For ≥ 1 rf/Income/Education, The Association Between Severe Obesity And Not Meeting Rsi Remained Strong For Females And Negligible For Males.

Conclusions

Robust Association Between Severe Obesity And Not Meeting Rsi Among Females Requires Actions Towards Mitigating Gender Inequalities. Our Results Also Highlight The Crucial Need For Considering Severe Obesity As One Of The Key Rfs And Promoting Screening To Improve Early Crc Detection.

Op02

Striking Findings On Early Onset Colorectal Cancers In Ethiopia- A Multi-Centre Retrospective Study.

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Background And Purpose

The Burden Of Early Onset Colorectal Cancer Has Been Increasing Globally In The Last Three Decades And Currently Contributing 10-12% Of The Total Disease Burden In Developed Countries. Increasing Trend Has Also Been Observed In Developing Countries. Data From Africa And Other Developing Countries Regarding The Magnitude Of Colorectal Cancer In The Young Are Scarce. The Purpose Of Our Study Is To Evaluate The Relative Prevalence Of This Cancer Among Ethiopian Patients Younger Than 50 Years Of Age.

Methods

A Multi-Center Retrospective Evaluation Of Colonoscopy Registrations And Computer Database Was Performed. Results Of All Consecutive Patients For Whom Colonoscopy Findings Were Documented Were Collected Using Microsoft XI. Then All Patients With Colonoscopic Diagnosis Of Colorectal Masses With Features Of Malignancy Were Sorted Out And Categorized Based On Age And Gender. The Results Were Analyzed Using Tables And Described On Bar Graphs.

Results Of The Total 3076 Colonoscopy Procedures, 549 (17.8%) Were Diagnosed With Colonoscopic Features Of Colorectal Malignancy. Of These 309 (56.3%) Were Male And 240 (43.7%) Female. Among These, 52 /117(44.4%) Of The Patients Seen In The Peripheral Centers Were Age 50 Years Or Younger. Also 210/432(48.6%) Of The Patient Diagnosed With Colorectal Malignancy The Central Referral Hospital Were Younger Than 45 Years Of Age And 70% Were Below The Age Of 55. In Addition, 12% Were Diagnosed With Colorectal Polyps, Of Which About 40% Were Again In People Age 50 Years And Below.

Conclusions

Colorectal Cancers Were Among The Most Common Abnormal Findings At Colonoscopy Procedures In Ethiopia. Up To 50% Of The Colorectal Masses And 40% Of Polyps Were Diagnosed In Patients Younger Than 50 years Of Age. Future Screening Guidelines And Clinicians Practicing In Ethiopia Must Be Aware Of This Peculiar Age Distribution For The Effective Prevention And Early Diagnosis Of Colorectal Cancers.

Op03

Effectiveness Of Endoscopic Vacuum Therapy For Anastomotic Leaks In Rectal Surgery - A Tertiary Oncologic Centre's Cohort

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Background

Nowadays The Number Of Sphincter Preservation Procedures Has Increased Dramatically But Also Did The Number Of Anastomotic Leaks (Al). For Selected Patients, Endoscopic Vacuum Therapy (Evt) Appears As A Valid Alternative, Sparing Patients From A Surgical Re-Intervention.

Purpose

Primary: To Evaluate The Efficacy (Defined As The Complete Closure Of Al In Endoscopic And Radiologic Exams) Of Evt And The Rate Of Patients Undergoing Reconstruction Of Bowel Continuity.

Secondary: To Assess Complications, Duration Of Treatment And Relapses Of Al.

Methodology

Retrospective Single-Centre Study, Recruiting All Patients Who Underwent Evt For Colorectal And Ileo-Anal Al (10/2017 To 12/2021).

We Analysed The Patients' Demographics, The Type Of Surgery Performed, The Number Of Evt (Endo-Sponge[®]) Sessions And Their Effectiveness.

Results

N = 13; Age 18-77 (Median 59); Male 8/13; Smoking Habits: 2/13;

Ileo-Anal Anastomoses - Surgery For Familial Adenomatous Polyposis: 2/13; Colorectal Anastomoses – Low Anterior Resections For Rectal Adenocarcinomas: Mid Rectum 7/13; Low 4/13;

Neoadjuvant Chemoradiotherapy: 11/11; Protective Stoma 13/13; Adjuvant Therapy 9/11;

Postoperative Day At Al Diagnosis: Median 25 (Aiq 7-56); Antibiotherapy 13/13; Days Until Start Of Evt:

Median 26 (Aiq 1-245); Leak Dimensions 6-120mm (Median 38mm);

Endo-Sponge[®] Number Of Sessions: 3-17 (Median 9); Median Duration Of Treatment: 31 Days (Aiq 14-76);

Evt With 2 Sponges: 3/13; Other Endoscopic Treatments: 7/13 (6 Through-The-Scope Clips; 1 Over The Scope Clip).

Primary Efficacy 9/11 (81%; 2/13 Still Under Treatment); Adverse Events: 1/13 (1 Sponge Migration);

Late Relapses 2/9 (1 Surgical Approach; 1 Evt Again);

Reconstruction Of Bowel Continuity: 7/9 (78%; 1 Permanent Stoma; 1 Died From Disease Progression).

Conclusions

Evt For Colorectal And Ileo-Anal Al Has Been Safe And Effective, With Huge Positive Impact On Patient's Quality Of Life, By Making The Intestinal Tract Reconstruction Possible. The Complementarity Of Evt And Other Endoscopic Therapeutic Modalities Achieves Better Results.

Op04

Ace2 Expression In Colorectal Cancer Patients' Survival Infiltrated With Macrophage Associated With Covid-19 Pandemic: Integration Of Real-World Data And Biomedical Informatics

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Colorectal Cancer (Crc) Is Emphasized More And More Nowadays. Crc Is The World's Fourth Most Deadly Cancer With Almost 900,000 Deaths Annually. Old Age, Western Dietary Habits, Lack Of Micronutrien. Also, The Tumor Microenvironment (Tme) Is Frequently Reported In Crc Development.

Angiotensin Converting Enzyme 2 (Ace2) Is Known To Be Expressed In Various Human Organs, And Its Organ- And Cell-Specific Expression Suggests That It May Play A Role In The Regulation Of Cardiovascular And Renal Function, As Well As Fertility. In Addition, The Encoded Protein Is A Functional Receptor For The Spike Glycoprotein Of The Human Coronavirus Hcov-Nl63 And The Human Severe Acute Respiratory Syndrome Coronaviruses, Sars-Cov And Sars-Cov-2, The Latter Is The Causative Agent Of Coronavirus Disease-2019 (Covid-19).

Moreover, Covid-19 Big Data Is Gradually Developed Globally. Previous Studies Showe Some Correlation Between Covid-19 And Crc. Hence, We Launched This Study Using Integration Of Real-World Data Laboratory Biomedical Informatics To Investigate The Possible Pathways.

We Retrieved Data From Timer 2.0 For Crc Tme And Genomics. Who Epidemiology Website Revealed Covid-19 Infected Population Difference. String Database, Kegg 2.0, Gepia2, And Genemania Were Enrolled For Dataset Integration Of Crc Associated Clinical Survival Researches. Finally, We Established The Taiwan's Own Covid-19 Prevalence Database For Validation Of Our Study.

We Discovered That In Crc Tme, Two-Year Overall Survival Of Crc Patients Was Better With Low Ace2 Gene Expression And High Macrophage Infiltration (Hazard Ratios 0.139, P-Value 0.0014). The Detailed Translational Process And Signal Transduction Of Crc Were Found And Would Be Shown In The Conference. In Taiwan, Covid-19 Prevalence Was The Highest In Northern Part Compared With Other Regions. The Above-Mentioned Content Brought Us Further Promising Viewpoints Of Establishing Precision Medicine Toward Crc And Public Health Strategy Adjusttment.

Op05

Cost-Effectiveness Analysis Of Artificial Intelligence - Aided Colonoscopy For Adenoma Detection In Colorectal Cancer – A Canadian Perspective

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Background And Purpose: Artificial Intelligence (Ai)-Aided Colonoscopy Using The Gi-Genius™ Technology Improves Adenoma Detection. We Thus Now Evaluate The Cost-Effectiveness Of Gi-Genius In A Canadian Healthcare Setting.

Methodology: An Excel-Based Markov Simulation Model With One-Year Cycles And Lifetime Horizon Is Used To Estimate The Incremental Cost-Effectiveness Ratio (Icer) Comparing Standard Colonoscopy To Ai-Aided Polyp Detection With Colonoscopy (Gi-Genius™). The Target Population Is Comprised Of Patients Undergoing Colonoscopy After A Positive Fecal Immunochemical Test. Outcomes Of Effectiveness Include Life Years (Ly) Gained And Quality-Adjusted Life Years (Qaly). The Analysis Adopts A Canadian Provincial Payer Perspective With Direct Costs Associated With Healthcare Resource Utilization (Hcu), Including Procedure (Diagnostic, Surgery, Chemotherapy) And Follow-Up Visits Expressed In 2021 Canadian Dollars Yearly Discounted At 3.5%. Patient-Reported Outcomes And Costs Associated With Hcu Are Sourced From The Published Literature And Publicly Accessible Databases. Deterministic And Probabilistic Sensitivity Analyses Are Performed To Assess Robustness Of The Model.

Results And Discussions: In The Base-Case Analysis, Applied To 1,000 Patients Yearly, Lys Gains Achieved In The Gi-Genius Assisted And Colonoscopy Alone Groups Are 19.144 And 19.125 (Difference = 0.019), Respectively. Similarly, Qaly Gains For Gi-Genius Assisted And Colonoscopy Alone Are 17.137 And 17.113 (Difference = 0.024), Respectively. The Per-Case Cost Of Gi-Genius Assisted, And Colonoscopy Alone Are \$3,004.59 And \$2990.74, Respectively (Saving Of Approximately \$14). With A Willingness-To-Pay Value Set At \$50,000 Per Qaly, The Icer Is A Dominant Strategy For Both Outcomes, Showing Gi-Genius Is Cost-Effective. The Deterministic Sensitivity Analysis Shows The Model Is Sensitive To The Incidence Risk Ratio Of Adenoma Per Colonoscopy For Larger Adenomas As Main Cost Driver. The Probabilistic Sensitivity Analysis Shows Gi-Genius Use Is Cost-Effective In Up To 73% Of Cases.

Conclusions: The Addition Of Gi-Genius Ai-Aided Coloscopy Is A Cost-Effective Strategy Promoting Adenoma Detection In A Canadian Public Healthcare System Practice.

Development Of Janus Microspheres Of Polydioxanone And Poly Lactic Acid To Address Multifactorial Persistence Of Complex Anal Fistula

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Bioresorbable Polymers Are Of Great Interest To The Medical Sector As A Means Of Invasive Interventions, As They Can Be Subjected To Degradation In The Human Body. Polydioxanone Is A Synthetic Bioresorbable Polymer That Has Been Around Since The 1980's, Yet The Majority Of Its Medical Application Has Been As Suture Material.

Wound Care Is Continuously Adapting To The Emerging Advances In Surgical, Biological And Biomaterial Interventions For Treating Complex Wounds. The Prevalence Of Chronic Wounds In Society Remains At 1.5% Of The Population Worldwide. The Increasing Prevalence And Incidence Of Chronic Wounds Is A Considerable Source Of Patient Morbidity And A Substantial Financial Burden To Both Hospital And Community Healthcare Providers. The Multifactorial Interplay Of Disease Persistence Factors Such As Bacterial Infection And Adverse Inflammation; Can Hinder The Regenerative Capacity Of Wound Tissues And Are Often Not Treated Locally At The Wound Site.

To Address This, Novel Janus Microspheres Of Bioresorbable Polymers; Polydioxanone (Pdo) And Polylactic Acid (Pla), Were Produced By The Solvent Evaporation Technique. The Physicochemical Characteristics Of These Novel Microspheres Were Characterised By Ftir, Dsc, Xrd And Sem. Processing Conditions Were Not Observed To Alter Innate Polymers However, The Retention Of Residual Solvent Within The Polymer Matrix Reduced The Thermal Stability By 5%. The Integration Of Drugs By Solvent Evaporation Was Observed To Convert The Drug From Its Crystalline State Into An Amorphous State With Spatial Distribution Throughout The Microsphere.

Depending On The Ratio Of Pdo And Pla, Different Janus Morphologies Were Observed. The Formation Of The Core-Shell Structure Was Observed Predominantly In The 50:50 Pdo/Pla Blend. As Both Polymers Degraded Through Hydrolysis, The Janus Nature Of These Microspheres Facilitates Time-Dependent Release Of Both An Antimicrobial Agent And An Anti-Inflammatory Agent.

Op07

Impact Of The Covid-19 Pandemic On The Colorectal Cancer Screening In South Korea: A Population-Based Study

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Background/Purpose

The Covid-19 Pandemic Had A Negative Effect On Colorectal Cancer (Crc) Screening In Western Countries, But, There Is Little Data From Asian Countries. This Study Aims To Evaluate The Impact Of Covid-19 Pandemic On The Crc Screening In South Korea.

Methodology: We Conducted A Population-Based Study For Colonoscopy Claims On The Basis Of The Health Insurance Review And Assessment (Hira) Service Database From 2019 To 2021. The Number Of Patients Who Underwent Colonoscopy And Polypectomies, Treated And Operated For Crc In 2020 And 2021 Were Compared With Those In 2019.

Results And Discussion: The Annual Volume Of Diagnostic Colonoscopies In 2020 And 2021 Was Reduced By 6.9% And 00%, Respectively, Compared With Those In 2019. The Annual Number Of Patients Treated For Crc In 2020 And 2021 Was Reduced By 3.7% And 00%, Respectively, And The Annual Number Of Patients Operated For Crc In 2020 And 2021 Was Reduced By 4.2% And 00%, Respectively, Compared With Those In 2019. In March 2020, The Monthly Number Of Diagnostic Colonoscopies Was Reduced By 43.8% And The Monthly Number Of Patients Treated For Crc Was Reduced By 11.3% As Compared To Those In March, 2019. In April 2020, The Monthly Number Of Patients Operated For Crc Was Reduced By 7.3% As Compared To Those In April, 2019.

Conclusions: The Covid-19 Pandemic Has Led To A Transient Reduction In The Number Of Patients Screened, Diagnosed, And Operated For Crc. However, Negative Impact Of Covid-19 Pandemic On Crc Screening Was Rapidly Overcame In South Korea.

Op08

The Utility Of Lymphocyte To Monocyte Ratio And Neutrophil To Lymphocyte Ratio In Predicting Colorectal Cancer Prognosis.

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Background And Purpose

Colorectal Cancer (Crc) Is The Third Most Common Cancer Worldwide. Prognosis Depends Mostly On Stage And Cancer Histological Type. The Aim Is To Evaluate The Utility Of Inflammatory Biomarkers Such As Lymphocyte To Monocyte Ratio (Lmr) And Neutrophil To Lymphocyte Ratio (Nlr) In Predicting Crc Prognosis.

Methods

This Is A Prospective Study Carried Out At University Hospital "Mother Theresa", Tirana, Albania, From January To December 2020. Each Patient Was Diagnosed With Crc Based On Colonoscopy And Confirmed By Biopsy. All Patients Underwent Surgical Resection In The Department Of Surgery In Our Hospital. Based On Postoperative Data, Crc Was Classified Using The 7th Edition Of Ajcc. Then, We Created Two Groups; Early Crc (Stage I+Ii) And Advanced Crc Group (Stage Iii+Iv). The Sensitivity, Specificity, And Cut-Off Values Were Assessed Using A Receiver Operating Characteristic Curve Analysis.

Results: 83 Patients With A Mean Age Of 63.05 ± 11.63 Years Were Included In This Study. 61.4% Were Males And 38.6% Females. 64% Were Diagnosed With Colon Cancer While 36% With Rectal One. 63% Were Diagnosed At An Advanced Stage And 37% At An Early One. Moderately Differentiated Adenocarcinoma Was The Predominant Histological Type (79.5%).

No Association Was Found Between Lmr And Nlr Values And Crc Location ($P=0.113$, $P=0.595$ Respectively); And Histological Type ($P=0.111$, $P=0.311$ Respectively).

Roc Curve Analyses Revealed That Lmr (Auc=0.616, 95% Ci: 0.475-0.758) Is Satisfactory In Differentiating Early Stage Crc. A Lmr Cutoff Value Of >3.401 Has A Sensitivity Of 66,7% And A Specificity Of 62.3% For Early Crc ($P=0.061$). No Association Was Found Between Nlr And Crc Stage ($P=0.365$).

Conclusion: Our Study Shows That Lmr Can Be Helpful In Differentiating Between Local And Advanced Crc Stage. Measuring Preoperative Lmr May Be Helpful In Determining The Best Treatment Strategy For This Patients.

Participation In Colorectal Cancer Screening Programme In The Czech Republic: Analysis Of The Affecting Factors.

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Background And Purpose

Faecal Occult Blood Test (Fobt) Once A Year Or Colonoscopy Once In Ten Years Are The Two Options Approved For Colorectal Cancer (Crc) Screening Individuals Aged ≥ 50 Years In The Czech Republic. We Analysed Participation In The Screening Programme To Design Strategies For Improving General Participation.

Methodology

Data Was Collected From 4044 Participants (1866 Men, 2178 Women) Aged ≥ 50 Years By Questionnaires. Individuals Who Underwent Colonoscopy Within The Last 10 Years Or Fobt Within The Last 2 Years Were Classified As Participants In The Screening. The Separate Binary Logistic Regression Was Used To Estimate The Odds Ratio For A Set Of Variables.

Results

Among 4044 Participants, 1050 Individuals (26%) Participated In Fobt, 464 (11.5%) In Colonoscopy And 558 (13.8%) In Both. After Adjusting For Age, Sex And Education, The Following Results Were Statistically Significant ($P < 0.05$). A Higher Participation In The Screening Programme Was Observed In These Groups: Non-Smokers (Or = 1.25; 95% Ci 1.051–1.479), Ex-Smokers (Or = 1.51; 95% Ci 1.257–1.825), Respondents Consuming Smoked Meat Products Less Than Once A Week (Or = 1.26; 95% Ci 1.089–1.453), Practicing Physical Activity At Least Once A Week (Or = 1.25; 95% Ci 1.033–1.514), Hospitalized In The Past 12 Months (Or = 1.73; 95% Ci 1.466–2.048) And Those Consulting The Gp In The Past 12 Months (Or = 2.26; 95% Ci 1.872–2.735). The Participation Of Individuals Possessing A Risk Factor For Crc (Obesity, Smoking, Diabetes, Low Physical Activity, Drinking Of Alcohol) Was Not Higher.

Conclusions

Respondents Having A Tendance To A Healthy Lifestyle And Those Being In A Recent Contact With The Healthcare System By Various Means, Mainly Visiting Their Gp, Had A Higher Participation In The Screening Programme For Crc. Higher Participation Was Not Shown Among The Groups With An Increased Risk For Crc.

Deep Learning And Colon Capsule Endoscopy: Automatic Panendoscopic Detection Of Protruding Lesions

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Background And Purpose

Colon Capsule Endoscopy (Cce) Is An Alternative For Patients Unwilling Or With Contraindications For Conventional Colonoscopy. Colorectal Cancer Screening May Benefit Greatly From The Widespread Acceptance Of A Non-Invasive Tool Such As Cce. However, Reviewing Cce Exams Is A Time-Consuming Process, With The Risk Of Overlooking Important Lesions. Our Group Aimed To Develop An Artificial Intelligence (Ai) Algorithm Using A Convolutional Neural Network (Cnn) Architecture For The Automatic Detection Of Protruding Colonic Lesions In Cce Images.

Methodology

An Anonymized Database Of Cce Images Collected From A Total Of 124 Patients Was Used. This Database Included Images Of Patients With Colonic Protruding Lesions Or Patients With Normal Colonic Mucosa Or Other Pathologic Findings. A Total Of 5715 Images Were Extracted For Cnn Development. Two Image Datasets Were Created And Used For Training And Validation Of The Cnn, Containing 80% And 20% Of The Images, Respectively.

Results And Discussions

The Auroc For The Detection Of Protruding Lesions Was 0.99. The Sensitivity, Specificity, Positive Predictive Value And Negative Predictive Value Were 90.0%, 99.1%, 98.6% And 93.2%, Respectively. The Overall Accuracy Of The Network Was 95.3%.

Conclusions

The Developed Deep Learning Algorithm Accurately Detected Protruding Lesions In Cce Images. The Introduction Of Ai Technology To Cce May Increase Its Diagnostic Accuracy And Acceptance For Screening Colorectal Neoplasia.

Op11

Topical Mesalazine For Familial Adenomatous Polyposis And Mutyh-Associated Polyposis Patients With Rectal Stump/Ileal Pouch Adenomas

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Background And Purpose

Familial Adenomatous Polyposis (Fap) And Mutyh-Associated Polyposis (Map) Are Hereditary Syndromes With High Colorectal Cancer (Crc) Risk. Affected Patients Who Undergo Colectomies/Proctocolectomies Can Still Develop Rectal Stump/Ileal Pouch Adenomas And A Second Surgery May Imply A Definitive Stoma. Mesalazine Has An Established Role For Crc Prevention In Inflammatory Bowel Disease And May Interfere With Wnt Carcinogenesis, The Altered Pathway In Fap And Map.

Methodology

Investigator-Driven Pilot Clinical Trial- Efficacy Study, Before-After Design, Non-Randomized, Unblinded. Consecutive Fap/Map Patients With Rectal Stump/Ileal Pouch Adenomas In The Previous Year Were Proposed For Mesalazine Enema Application (1g/Day) For 12 Months. Sigmoidoscopies With Excision Of All Polyps Larger Than 5 Mm Were Scheduled Every 6 Months For 18 Months. Adenomas' Incidence, Number, Size And Grade Of Dysplasia And Non-Dysplastic/Endoscopically Normal Mucosal Proliferative Index [Pi(Ki-67)] And Nuclear Beta-Catenin Imunoexpression Were Compared Before And After Treatment.

Results

Two Patients Were Included Before The Trial Was Stopped Due To The Covid Pandemic. One Patient (Male, 49 Years Old, Fap) Completed 12 Months Therapy— No Differences In Adenomas' Incidence, Number, Size And Grade Of Dysplasia Between The Year Before/Year Under Therapy; Normal Mucosa Ki-67 Pi Decreased From 20% At 0 And 6 Months To 10% At 12 Months Treatment; One Patient (Female, 66 Years Old, Map) Completed 6 Months Therapy (Lack Of Compliance)- 1 High Grade Dysplasia 45mm Adenoma The Year Before Therapy, 0 Adenomas Under Therapy; Normal Mucosa Ki-67 Pi Decreased From 30% At 0 Months To 25% At 6 Months Treatment. Beta-Catenin Imunoexpression Remained Unchanged In Both Patients.

Conclusions

The Pilot Data Support The Need For Further Studies Of Mesalazine's Preventive Role In Fap/Map. This Work Was Supported By Inova4health – Uidb/04462/2020, A Program Financially Supported By Fundação Para A Ciência E Tecnologia (Fct) / Ministério Da Educação E Ciência, Through National Funds.

Lowering The Threshold Age For Screening Colonoscopy Seems Justified In Iran

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Background And Purpose

The Age For Screening Colonoscopy Has Been Lowered To 45 Years In The West. To Assess Whether It Is Needed To Lower The Age Threshold For Colonoscopy In Eastern Countries Like Iran As Well, We Conducted This Study.

Methodology

In A Prospective Study, All Patients Aged 40 Years And Above, Referred For Screening Colonoscopy Or As Assessment Of Irritable Bowel Syndrome Were Enrolled. Polyp Detection Rate And Adenoma Detection Rate Were Recorded For Age Groups Of 40 To 44 Years, 45 To 49 Years And Above 50 Years. The Prevalence Of Polyps In These Age Groups Were Compared And The Descriptive Data Are Reported. Chi Square Test Was Used For Comparison.

Results And Discussions

A Total Of 3821 Colonoscopies Were Recorded During The Study Period. Mean Age Of Participants Was 57.3 (Sd: 10.3) Years And 2066 (54.5%) Were Female. A Total Of 3406 Polyps Were Diagnosed In 1553 Individuals (Polyp Detection Rate= 41.6%). Polyp Detection Rates Were 25.9%, 36.6%, And 44.7% For 40 To 44 Years, 45 To 49 Years, And 50 Years And Over Age Groups Respectively. Overall Adenoma Detection Rate Was 36.4%. Of The Polyps Detected, 92.7% Were Adenomas Among Those 50 Years And Over As Compared To 50.5% In Those 40 To 44 Years Old. In Our Study More Than 88% Of The Polyps Were Smaller Than 10mm And The Most Common Site For Polyp Detection Was The Sigmoid (24.6%).

Conclusions

According To Our Data, Polyps And Adenomas Are Fairly Common Among 45 To 49 Years Old Average Risk Iranians. This Suggests That A Lower Threshold Age For Screening Colonoscopy May Be Justified.

Op13

10-Year Experience In Assessing The Effectiveness Of Peroxide Hemostasis

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Background And Purpose

Progress In The Emergence And Improvement Of New Methods Of Endoscopic Hemostasis Indicates The Dissatisfaction Of Physicians With The Reliability And Universality Of The Methods. We Analyzed The Results Of 10-Year Use Of Infiltration Hemostasis By 1% Hydrogen Peroxide Solution As A Patented Technology Of Endoscopic Hemostasis.

Methods

In 2010-2021, All Patients With Clinical Upper Gastrointestinal Bleeding (Ugib) Underwent Gastroscopy On Admission And Hemostasis By 10-30 ml 1% Hydrogen Peroxide Solution At The Height Of Bleeding (Forrest 1, Forrest 2a/B). For Dieulafoy Defects Or Mallory-Weiss Tears, Infiltration Was Used After Clipping. Statistical Analysis Was Performed Using Statistica 10 Software (Statsoft, Russia). Chi-Square Test, Yates' Correction For Continuity (Yates' Chi-Square Test), Or Fisher's Exact Test Were Used. Interpretation Of Statistical Significance Of Differences Was Based On The Criterion $P < 0.05$.

Results

Endoscopic Hemostasis Was Performed In 1487 Patients (74%). All Patients Had A Glasgow-Blatchford Bleeding Score Of 4 To 16. The Most Frequent Causes Of Ugib Were Chronic Gastric Ulcers 368 (20%) And Duodenum Bulb Ulcers 335 (17%), Variceal Bleeding 170 (14%) And Mwt 238 (15%). The Overall Recurrence Rate Of Bleeding Was 7% (104 Cases). The Highest Recurrence Rate Was In Chronic Gastric Ulcers - 13% (48 Patients). At Effective Hemostasis The Area Of Infiltration With Hydrogen Peroxide Solution (Hemostatic Cushion) Persisted From 3 Hours To 30 Days. At Recurrent Bleeding The Hemostatic Cushion Was Not Preserved ($\chi^2=44.71$, $P=0.0000$). Emergency Operations At The Height Of Bleeding In 2010 Were 10% (18 Patients), In 2021 - 3% (4 Patients) ($\chi^2= 5.207$, $P=0.023$). There Were No Complications From The Use Of 1% Hydrogen Peroxide Solution.

Conclusions

Infiltration Endoscopic Hemostasis By 1% Hydrogen Peroxide Solution Is A Cheap, Highly Effective And Safe Way To Stop Ugib.

Op14

Comparison Of Histoacryl® Plus Lipiodol® Versus Histoacryl® Plus Vitamin D3 In The Management Of Isolated Fundal Varices

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Background & Purpose

Recent Guidelines Recommend Histoacryl® (N-Butyl-2 -Cyanoacrylate) Injection As The First Line Therapy For The Endoscopic Obliteration Of Gastric/Fundal Varices. Lipiodol Is Commonly Used As A Priming Agent For Endoscopic Injection Histoacryl® But Lipiodol Is Expensive And Not Easily Available In Our Setup. The Purpose Of This Study Is To Compare Lipiodol With Vitamin D3 Injection As Priming Agents For Histoacryl Injection In Terms Of Efficacy And Safety In The Management Of Isolated Fundal Varices.

Methodology: An Observational Study Design Was Utilized. Two Hundred Patients, Who Had Presented With Upper Gastrointestinal Bleeding And Had Isolated Fundal Varices (Igv-1 According To Sarin Classification) On Endoscopy, Were Included In The Study. Patients Were Divided Into Two Groups On The Basis Of Endoscopic Treatment Using Histoacryl Plus Lipiodol Or Histoacryl Plus Vitamin D3. Data Was Statistically Analyzed In Terms Of Successful Hemostasis, Re-Bleeding, Variceal Obliteration, Mortality, And Adverse Events Related To Treatment, Using Spss Version 25.

Results

All The Cases In Both Groups Were Treated Successfully. There Were No Adverse Events Related To Procedure In Either Group. Twenty Six Patients Developed Upper Gi Re-Bleeding, Which Did Not Differ Significantly Between The Two Groups. There Was Also No Difference Between The Groups In Terms Of Treatment Failure, Complications, Varices Obliteration, And Mortality. Conclusion: Vitamin D3 Is As Safe And Effective As Lipiodol When Used As Priming Agent For Histoacryl Injection For Obliteration Of Isolated Fundal Varices And Can Be Used As A Cheaper Alternative To Lipiodol

Op15

Non-Invasive Screening Of Esophageal Varices In Patients With Liver Cirrhosis

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Purpose & Background

To Determine The Diagnostic Performance Of Non-Invasive Scoring Systems In Predicting The Presence Of Varices In Patients With Liver Cirrhosis By Using Endoscopy As The Standard Reference. The Recommended Method For Identifying The Presence Of Varices In Cirrhotic Is Esophagogastroduodenoscopy (Egd). The Disadvantages Of Egd Include The Complications Associated With Endoscopy, Especially The Need For Intravenous Sedation And Cost. There Are Many Non-Invasive Markers Proposed For Detecting Esophageal Varices With Varying Degree Of Success.

Methodology

In This Analytical Cross Sectional Study We Had 110 Patients With Liver Cirrhosis Without A History Of Variceal Bleeding. Demographic, Clinical, Biochemical And Ultrasonographic Parameters Were Recorded. We Used Selected Non-Invasive Parameters Such As, Ast To Platelet Ratio Index (Apri), Platelet Count To Spleen Diameter (Pc/Sd), fibrosis-4-Index (Fib-4), Bonacini Score And King's Score. Esophageal Varices Were Confirmed By Endoscopy.

Results

The Study Population Had Mean Age Of 43 ± 9 Years. On Evaluation Of The Studied Non-Invasive Parameter In Predicting Ev It Was Noted That Fib-4 Was Significant (Sensitivity Of 86%, Specificity 64%) With Cutoff Of 3.15, Bonacini Score Was Significant (Sensitivity 81%, Specificity 61%) With A Cutoff Of 6, Pc/Sd Was Significant (Sensitivity Of 80%, Specificity 57%) With A Cutoff Of 884.3 And King Score Was Significant (Sensitivity Of 76%, Specificity 54%) With A Cutoff Of 36.7. By Multivariate Regression Analysis Of The Significant Parameters, We Reported That Fib-4 Was The Most Significant Parameter Followed By Bonacini Score, Pc/Sd And King Score Respectively.

Conclusion

Non-Invasive Methods Have Provided Alternatives For Screening Egd In Cirrhotic Patients. However, This Is An Area That Could Still Benefit From Further Research

Peroxide Hemostasis: Analysis Of Recurrent Upper Gastrointestinal Bleeding (Ugib)

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Background And Purpose

Ugib Recurrence Remains The Most Frequent Cause Of Operative Activity And Mortality. Despite Known Prognostic Risk Scales For Recurrent Bleeding, Achieving Reliable Hemostasis And Preventing Emergency Surgery Remains A Costly Problem. In Our Cases, The Problem Is Exacerbated By The Scarcity Of Medications And Expensive Consumables For Technical Support Of Hemostasis. Our Aim Was To Assess Risk Factors And Frequency Of Recurrent Bleeding After Endoscopic Hemostasis By Infiltration With 1% Hydrogen Peroxide Solution.

Methods

In 2000-2010 (Period 1), A Combination Of Saline Infiltration With Adrenaline Or Aminocaproic Acid Solution, Clipping And/Or Electrocoagulation, And Alcohol Irrigation Were Used For Endoscopic Hemostasis In 1569 Of 2312 Patients. In 2010-2021 (Period 2), 1487 Of 2011 Patients With Clinical Ugib Underwent Gastroscopy On Admission And Hemostasis By 10-30 ml Of 1% Hydrogen Peroxide Solution (Before Or After Clipping And/Or Alcohol Irrigation). Statistical Analysis Was Performed Using Statistica 10 Software (Statsoft, Russia). We Used Chi-Square Test, Yates Correction For Continuity (Yates Chi-Square Test), Or Fisher's Exact Test. Interpretation Of Statistical Significance Of Differences Investigated In Simple Analyses Was Based On The Criterion $P < 0.05$.

Results

Both Periods Were Comparable In Terms Of Bleeding Source Structure, Gender, Age. The Overall Recurrence Rate Of Bleeding From The Type Of Hemostasis Was 23% Vs 7% ($\chi^2=151.770$, $P<0.001$). The Recurrence Rate For Chronic Ulcer Was 33% Versus 13% ($\chi^2=43.279$, $P < 0.001$). The Recurrence Rate For Mellori-Weiss Tears Was 9% Versus 1% ($\chi^2=15.105$, $P < 0.001$). The Recurrence Rate For Variceal Bleeding Was 28% Versus 11% ($\chi^2= 17.407$, $P < 0.001$).

Conclusions

1% Hydrogen Peroxide Solution For Hemostasis Of Ugib Is Highly Effective, Significantly Reducing The Recurrence Rate Regardless Of Other Prognostically Unfavorable Factors

Prognostic Value Of Risk Scoring Systems In Predicting Clinical Outcomes And Intervention In Patients With Non Variceal Upper Gastro-Intestinal Bleeding

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Introduction

Non-Variceal Upper Gastrointestinal Bleeding (Nvugib) Remains A Common Medical Emergency. The Early Use Of Risk Stratification Scores Is Recommended For Follow Up And Treatment Selection In Patients With Nvugib. The Most Used Risk Scoring Systems Are The Glasgow–Blatchford (Gbs), The Rockall Score (Rs) And Aim65. We Aimed To Determine The Prognostic Value For Each Scoring System In Predicting The Need For Blood Transfusion, Endoscopic Treatment, Surgery Requirement, Short-Term Mortality, And Re-Bleeding Among Patients With Nvugib.

Methods

Retrospective Descriptive And Analytical Study Conducted Between January 2020 To December 2021 Including Patients With Nvugib. Gb, Rs And Aim65 Were Calculated. The Accuracy Of The Scores In Predicting Patient's Outcomes Was Assessed By The Receiver Operating Characteristic Curve (Roc) And The Area Under The Curve (Auc). P-Value<0.05 Was Considered To Be Statistically Significant.

Results

A Total Of 219 Patients Were Enrolled. The Mean Age Was 54 Years And 67,1% Were Men. Blood Transfusion Was Indicated In 60,7%. Endoscopic Therapy Was Required In 13,3% And 1,7% Underwent Surgery. Rebleeding Occurred In 0,6%. The In-Hospital Mortality Rate Was 3,5%. The Median Risk Scores Were As Follows: Gbs: 2, Rs: 4 And Aims65: 7 .

Aim65 Performed The Best In Predicting The Need For Transfusion (Auc=0,928, P<0,001) And Endoscopic Therapy (Auc=0,342, P=0,03). The Cut-Off Points Were 7 And 3; Respectively

The Performance Of The Gbs Was Similar To Both Rs And Aim65 (Auc=1, P<0,001) In Predicting Surgery. Gbs Showed The Best Discriminative Ability In Predicting Mortality (Auc=0,988,P<0,001). A Cut-Off Of 4 On The Gbs Predicted This Outcome With 100% Sensitivity And 98.8% Specificity. All Three Scores Were Unable To Predict Rebleeding (P>0,05)

Conclusion

Gbs, Rs, And Aim65 Are Not Precise Scoring Systems For Assessing The Risk Of Re-Bleeding. The Aim65 And Gb Performed Well In Predicting The Need For Transfusion, Endoscopic Treatment And Short-Term Mortality.

Op18

Impact Of Lactobacillus Reuteri Supplementation On Clarithromycin-Based Sequential Therapy For Helicobacter Pylori Eradication

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Background And Purpose:

Probiotics Are Under Debate Regarding Efficacy In H.Pylori Eradication As Compared To Conventional Therapies. Therefore, We Aimed To Determine The Efficacy Of Addition Of Lactobacillus Reuteri To Conventional Therapy In Comparison To Conventional Therapy Alone.

Methodology

An Open Label Randomized Control Trial Is Being Conducted At Gastroenterology Department, Liaquat National Hospital, Karachi. Patients Aged 18 - 60 Years With Detection Of H Pylori Via Histopathology, Stool Antigen Or Rapid Urease Test Were Assigned To Two Groups Through Sequentially Numbered Opaque Sealed Envelope Protocol. Sequential Therapy (Control Group) Consisted Of Omeprazole 20mg Twice Daily , Amoxicillin 1g Twice Daily For First 5days, Clarithromycin 500mg Twice Daily And Tinidazole 500mg Twice Daily For Next Five Days. In Intervention Group, Lactobacillus Reuteri 100mg Twice Daily For 2weeks Was Added In Sequential Therapy. Successful Eradication Was Defined As Negative H Pylori Stool Antigen 4 Weeks After Eradication Therapy .

Results

Total 197 Patients Have Been Enrolled In The Study With 70 (35.5%) Patients In Intervention Group. Two Study Groups Did Not Differ On The Basis Of Age ($P=0.617$) And Gender ($P=0.491$). Median Duration For The Resolution Of Symptoms Was 8 (Iqr=6 – 12) Days In Intervention Group While It Was 11 (Iqr=8 – 18) Days In Control Group ($P=0.043$). Post Eradication Hpsa Negativity In Intervention Group Was Achieved In 51(72.9%) Patients And In Control Group, It Was Achieved In 120 (94.3%) Patients (Figure 1). Higher Eradication Rates Were Achieved In Control Group As Compared To Intervention Group ($P<0.001$) But Addition Of Lactobacillus Resulted In Early Resolution Of Symptoms.

Conclusion

This Study Analysis Showed That There Was No Benefit In H.Pylori Eradication By The Addition Of Lactobacillus Reuteri To Sequential Therapy But It Resulted In Early Resolution Of Symptoms As Compared To Conventional Therapy.

Predictors Of Failure Of Endoscopic Retrograde Cholangiography In Clearing Bile Duct Stone On The Initial Procedure

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Aims: Evaluate The Predictive Factors Of Failure Rate Of Clearing The Biliary System From Stones At The Initial Ercp.

Methods: This Is A Retrospective Descriptive And Analytical Study From September 2002 To September 2021.

All Patients With Bile Duct Stones, Who Underwent Ercp With Endoscopic Sphincterotomy And Stone Extraction By Standard Techniques (Extraction Balloon Or Dormia Basket) Were Included In This Study.

Results:

A Total Of 1080 Ercps Were Performed To Extract Biliary Duct Stones.

The Mean Age Was 58.9 +/- 14.4 Years And 59.5% Were Females.

The Mean Diameter Of The Bile Duct Was 13.4 +/- 4.31 Mm. The Presence Of A Biliary Stricture In 6.3%.

The Primary Vacuity Rate Was 75.1%. Supplementary Techniques Were Used In 22.7% Of Cases.

On Univariate Analysis, The Predictive Factors For Failure After Use Of Standard Techniques Were: Age(Or: 0.9;Ci95%:-0.03- -0.01;P<0.001); Gender(Or:0.7;Ci95%:-0.5--0.02;P=0.036); Previous Cholecystectomy (Or:1.3,Ci95%:0.02-0.6;P=0.035);Presence Of Angiocholitis(Or: 0.4; Ci95%:-1.1- -0.4;P<0.001); Dilatation Of The Cbd >15mm (Or:0,8,Ci95%:-0.2-0.1;P<0.001), Biliary Stricture (Or:0.3;Ci95%:-1.7--0.7;P<0.001) And The Presence Of Impacted And/Or Large Stone (Or:0.1;Ci95%:-2--1;P<0.001).

On Multivariate Analysis, Only The Presence Of Angiocholitis (Or:1.9;Ci95%: 0.2-1;P=0.001), Impacted And/Or Large Stone (Or:2.5;Ci95%:0.5-1.3;P<0.001), Dilatation Of The Cbd >15mm (Or:0.88;Ci95%:-0.17- -0.07;P<0.001), And Biliary Stricture (Or:2.9;Ci95%:0.4-1.7;P=0.002) Were Significantly Associated With Failure Of The Primary Cbd Vacuity Rate.

The Overall Vacuity Rate After Using The Supplementary Techniques Was 92.4%.

Conclusion:

In Our Study, Predictive Factors For Failure Of The Primary Cbd Vacuity Rate Were The Presence Of Angiocholitis, Impacted And/Or Large Stone, Dilatation Of The Cbd (>15mm) And Biliary Stricture.

Involvement Of Heparanase In The Pathogenesis Of Acute Pancreatitis: Implication Of Novel Therapeutic Approaches

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Introduction: The Pathophysiology Of Acute Pancreatitis (Ap) Is Not Well Characterized. Heparanase (Hpa) Plays An Important Role In The Pathogenesis Of Ap In An Animal Model. Aspirin Has Also Been Demonstrated To Inhibit Hpa Activity. Moreover, Trehalose Was Shown To Alleviate Experimental Ap Via Unknown Mechanism. We Hypothesize That A Combination Of Hpa Inhibitors And Aspirin Or Trehalose Can Ameliorate Ap More Than Each Drug Alone.

Aims: To Examine Whether Combination Of Pixatimod (Pg545) Or Ronaparstat (Sst0001), Two Inhibitors Of Hpa With Aspirin Or Trehalose, Exerts Additive Or Synergistic Pancreato-Protective Effect In Cerulein-Induced Ap In Mice.

Methods: Heparanase-Overexpressing Transgenic Mice (Hpa-Tg) And Wild-Type (Wt) Animals Were Intraperitoneally Injected With Either Cerulein Or Vehicle, With Or Without Either Pixatimod, Ronaparstat, Aspirin, Trehalose Or Combination Of These Drugs. The Animals Were Sacrificed 24 Hours Following The Induction Of Pancreatitis. The Severity Of Ap And Architectural Structure Changes Were Evaluated By Serum Pancreatic Enzyme Levels, Inflammatory Cytokines, Pancreatic Edema Index, Tissue Inflammatory Response And Autophagy Response.

Results: Cerulein-Induced Ap In Wt Mice Was Associated With Significant Rises In The Serum Levels Of Amylase And Lipase. These Increases Were Characterized By Enhancement Of Pancreatic Edema Index, Tissue Inflammation, And Autophagy Response. All Types Of Responses Were More Profound In Hpa-Tg Mice. The Severity Of Ap Was More Profound In Females Wt And Hpa-Tg Mice As Compared With Male Animals. Pretreatment With Pixatimod, Ronaparstat, Aspirin Or Trehalose Reduced Pancreatic Inflammatory Response, Autophagy, And Ultrastructure (Electron Microscopy) Along Remarkable Reduction In Amylase And Lipase Serum Levels In Both Wt And Hpa-Tg Mice. Noteworthy, Combination Of Aspirin Or Trehalose With Either Pixatimod Or Ronaparstat Completely Abolished Ap.

Conclusions: Heparanase, Therefore, Emerges As A Potential New Target In Ap, And Heparanase Inhibitors Alone Or In Combination With Nsaids Or Trehalose Are Hoped To Prove Beneficial In Ap.

The Concentration Of Chitinase-3-Like-1 Protein (Ykl-40) In Serum Of Patients With Acute Pancreatitis As A Potential Novel Biomarker Of Pancreatic Necrosis.

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Acute Pancreatitis (Ap) Is An Acute Disease Of The Pancreas With Multiple Etiologies. There Are Several Serum Indicators Of The Disease Severity (C-Reactive Protein (Crp), Procalcitonin (Pct)), But None Of Them Are Accurate. Ykl-40 (Chitinase-3-Like-1 Protein) Is A Glycoprotein That Plays A Major Role In Inflammation And Angiogenesis. The Aim Of This Study Is To Determine The Diagnostic Accuracy Of Ykl-40 In The Evaluation Of Ap Severity Including Pancreatic Necrosis (Pn). In This Prospective Study, We Recruited 32 Patients (10 Male, 22 Female) With Ap At The Uhc Sestre Milosrdnice, Zagreb, From June 2020 Until April 2022. After Obtaining Informed Consent, Crp And Ykl-40 Were Measured On Admission, 48 Hours And 7 Days After Admission. Chi Square And Fisher Exact Test Were Used To Compare Discrete, And Mann Whitney U For Continuous Variables. Receiver Operating Characteristic Curve Was Calculated For Ykl-40 And Crp Values For Three Measurements To Assess Diagnostic Ability For Severe Form Of Ap And Pn. Areas Under The Curve (Auc) Were Compared Using The Bootstrap Method. Both Ykl-40 (Auc 0.66 ; 0.84 ; 0.25) And Crp (Auc 0.77 ; 0.94 ; 0.94) Are Moderately Good Predictors For Ap Severity, With Crp Being Better Predictor (P<0.05 All Measurements). Both Ykl-40 (Auc 0.76 ; 0.91 ; 0.88) And Crp (Auc 0.75 ; 0.72 ; 0.74) Are Moderately Good Predictors For Pn, With Ykl-40 Being Better Predictor (P<0.05 All Measurements). We Have Shown That Ykl-40 May Be A Good Predictor For Pn, Which Is Reasonably Explained By It's Pathophysiological Role In The Tissue Remodelling, But Due To Our Small Sample Size And Low Study Power Further Measurements Are Needed To Confirm These Preliminar Results

Novel Treatment Of Covid 19, Evaluation Of Sofosbuvir And Daklatasvir Combo, Single Arm Study

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Back Ground & Aims

The Coronavirus Disease 2019 (Covid-19) Pandemic Is An Ongoing Global Health Crisis Caused By Severe Acute Respiratory Syndrome Coronavirus 2 (Sars-Cov-2). Intervening Early In The Disease Course By Antivirals Can Delay Progression And Improve Clinical Outcomes. Since Direct-Acting Antivirals (Daas) Changed The Entire Landscape Of Hepatitis C (Hcv) Treatment, There Has Been Considerable Interest With These Daas, Such As Sofosbuvir And Daclatasvir, As New Repurposed Options In Covid-19 Therapeutics . This Study Is Carried Out To Determine Whether Sofosbuvir/Daclatasvir-Based Regimens Improve Clinical Outcomes Of Patients With Moderate Or Severe Covid-19. Methods: This Was A Prospective Study Including Patients With Pcr- Confirmed Covid-19, That Were Treated With Sofosbuvir And Daklatasvir- Based Regimen For 14 Days. Results: Demographic Data Of The Included 54 Patients: Male (57%), Female (43%), Age <50 Years (48%), > 50 Years (52%), Smoking (9%), Diabetes Mellitus (9%) And Hypertension In 28% Of Patients. Clinical Presentation Of Covid-19: Fever (87%), Cough (97%), Dyspnea (70%), Chest Pain (61%), Sore Throat (53%), Diarrhea (50%), Mood Changes (43%), Muscle Pain (87%), Oxygen Saturation Median (93.5 +/- 5.5 %), And Ct Chest Changes Indicating Covid-19 Was Received In (55%) Of Patients. Laboratory Data: Pcr For Covid-19 Was Positive In (100%) , Crp Was Positive In (87%). Outcome: Complete Recovery Was Observed In 100%, And None Of The Patients Progressed To Severe Stage. Conclusions: Sofosbuvir/ Daclatasvir- Based Regimen Is Highly Effective And Safe In Curing Patients With Covid-19, Preventing Progression To Severe Stage As Well As In Decreasing Mortality.

Op23

Different Types Of Carbohydrate Metabolism Disorders In Chronic Pancreatitis

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Background

Carbohydrate Metabolism Disorders In Chronic Pancreatitis (Cp) Are Considered As Diabetes Mellitus (Dm) Type 3c.

Aim

To Assess The Frequency Of Dm And Insulin Resistance (Ir) In Cp Patients.

Methods: 62 Patients With Confirmed Cp (Mean Age $52 \pm 11,5$ Years; F:M=18:24) Were Included In A Monocentral Open-Label Study (14 Had A History Of Surgery) . Ir Was Assessed By Homa Index (Ir Index). To Calculate Homa The Fasting Blood Insulin Level Was Determined By Elisa And Glycemia Was Assessed On An Automatic Analyzer. The Homa Index Was Considered Elevated At A Value More Than 2,7.

Results

Dm Was Confirmed In 20 Out Of 62 Cp Patients (32%). In This Group Homa Index Was Increased In 14 Patients (70%) At Its Average Meaning $5,3 \pm 2,2$. Homa Was Not Increased In 6 (30%) Of Patients Only. Other 42 Patients Had No Confirmed Dm Although In Some Of Them Episodic Glycemia Up To 6.5 Mmol/L Was Noted. Among Them Homa Was Increased In 14 (33%) With Mean $2,4 \pm 0,7$. In Others It Was Normal. There Was No Significant Difference In Homa Value In Cp Patients With And Without Dm.

Conclusion: We Believe That Cp Patients May Have Different Types Of Carbohydrate Metabolism Disorders. The Majority Of Cp+Dm Patients (70%) Demonstrated Ir Which Indicates To Dm 2 Type. Only In 1/3 Of Cp Patients Dm Apparently Can Be Considered As Type 3c. Also, In 1/3 Of Cp Patients Without Obvious Dm Signs, Latent Ir Was Detected. In This Group Blood Glucose Level Or Glycated Hemoglobin (Hba1c) Should Be Monitored Regularly.

Efficacy Of Sacral Nerve Stimulation In Children With Refractory Idiopathic Constipation

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Background And Purpose

Sacral Nerve Stimulation (Sns) Is Being Increasingly Recommended In Children With Refractory Constipation. The Sparse Pediatric Data On The Efficacy Of Sns In Constipation Is Conflicting, And This Has Led To Ambiguity Over The Use Of Sns For Treating Children With Constipation. The Aim Of Our Study Is To Determine The Outcomes Of Pediatric Patients With Idiopathic Constipation Who Underwent Sns Placement.

Methodology

Electronical Medical Records, Of All Patients With Idiopathic Constipation Who Had Sacral Nerve Stimulators (Sns) Placed For Refractory Idiopathic Constipation, Were Reviewed. Data Retrieved Included Demographics, Symptoms, Imaging, Colonic Manometry Results, Treatment, And Complications.

Results And Discussions

Twenty Patients (12 Females, Median Age 10.2 Years) With Intractable Idiopathic Constipation Who Had Sns Placed Met Our Inclusion Criteria. Colonic Manometry Was Abnormal In 6 (30%) And Showed No Hapcs In The Distal 20-50cm Of Colon. Six (30%) Patients Underwent Sns Placement After Cecostomy, While 2 Patients (10%) Had Cecostomy (For Antegrade Enemas) (Ace) After Sns Placement. Six Patients (30%) Had Resection Of A Dilated Sigmoid (2 Of Them Post Sns Placement). Three (15%) Patients Had Their Sns Removed Due To Complication Or Failure To Respond. Follow Up Data Was Collected From A Mean Of 22.7 Months (Range 7-42 Months) After Sns Placement. Number Of Bowel Movements Improved In 6 (30%), Stool Consistency Improved In 5 (25%), And Soiling Episodes Decreased In 10 (50%) Patients. Laxatives And Enemas Were Able To Be Reduced In 10 (50%) Patients.

Conclusions

This Is The Largest Pediatric Study With The Longest Follow Up Data On The Efficacy Of Sns In Refractory Idiopathic Constipation In Children. Despite Concomitant Antegrade Enemas In 8 (40%), And Sigmoid Resection In 5 Patients With Ace And 1 Without, Placement Of Sns Did Not Uniformly Improve Outcomes Of Idiopathic Constipation In Children.

Percutaneous Drainage Is More Often Applied In The Treatment Of Acute Calculous Cholecystitis During The Covid-19 Pandemic

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Background

Acute Cholecystitis Is An Emergency Condition Often Leading To Surgical Inpatient Surgical Intervention. The Covid-19 Pandemic Has Had A Drastic Impact On All Medical Services. It Postponed All Non-Urgent Admissions And Surgical Procedures To Free Up Spaces For Covid-19-Infected Patients.

Aim

To Assess The Outcome Of Acute Calculous Cholecystitis During The Nationwide Lockdown Period.

Methods: All Patients Admitted To Our Emergency Department For Acute Cholecystitis Were Analysed. The Severity And Outcome Of Acute Calculous Cholecystitis And The Applied Treatment Modality Were Assessed During The Nationwide Lockdown Period (1 April 2020 – 30 November 2021) And Compare It To The Historical Control Period (1 May 2017 - 31 December 2018).

Results

Cholecystitis Admission Increased By 42.7% From 152 To 217 Cases In The Lockdown Period When Comparing To Historical Control (P=0.03). There Was No Difference In The Age, Gender Distribution And The Severity Of Cholangitis According To Tokyo Guidelines 2018 (Grade I 34.5% Vs 41.4%, P=0.27; Grade II 55.3% Vs 51.9%, P=0.61; Grade III 10.1% Vs 6.5%, P=0.11) And The Length Of Hospital Stay Between The Two Periods. The Inpatient (5.7% Vs 4.05%, P=0.62) And 30-Day Mortality (3.02% Vs 1.42%, P=0.47) Were Not Significantly Different Between The Two Periods. The Unplanned Readmission Rate Within 30 Days Was Significantly Higher In The Lockdown Period When Comparing To Control (6.84% Vs 1.41%, P=0.03). Percutaneous Drainage Was More Often (24.1% Vs 10.5%, P=0.03) While Conservative Treatment Was Less Frequently (46.7% Vs 55.9%, P=0.01) Applied In The Lockdown Period. Among The Indications Of Interventional Therapy The Rate Of Gallbladder Perforation Was Significantly Higher (32.7% Vs 13.4%, P=0.04) In The Lockdown Period.

Conclusion: A Significant Increase In Cases Of Acute Calculous Cholecystitis And Gallbladder Perforation And A Higher Rate Of Percutaneous Drainage And Unplanned Readmission Was Observed During The Nationwide Lockdown In The Covid-19 Pandemic.

A Rare Presentation Of Pancreatic Pseudo Cyst With Atypical Multi-Loculated Appearance- A Case Report.

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Pancreatic Pseudo Cyst Represent A Collection Of Amylase And Other Pancreatic Enzymes Surrounded By A Fibrous Tissue Wall, It Results From Several Weeks After An Episode Of Pancreatitis. Their Presentation On Radiological Imaging Resembles Pancreatic Neoplasm. Therefore A Pancreatic Pseudo Cyst Can Be Misdiagnosed Imaging But Correct Diagnosis Can Be Made Through Aspiration And Microscopic Examination Of The Fluid Via Eus.

Here We Report, Pancreatic Pseudo Cyst Mimicking A Cystic Neoplasm.

A 17 Years Old Male Presented With The Complaints Of Epigastric Pain For The Past 6 Months Associated With Vomiting And Diarrhea. His Symptoms Were Progressively Worsening For Last 4 Months With Anorexia And Undocumented Weight Loss. Patient's Previous Medical, Surgical And Family Histories Were Insignificant.

Computed Tomography Showed A Large Multi-Cystic Lesion Arising From The Head Of Pancreas Measuring 7.5 X 5.7 Cm In Size, Encasing The Right Hepatic Artery, Abutting Superior Mesenteric Vein And Main Portal Vein Which Was Consistent With The Suspicion Of Mucinous Cystic Neoplasm. The Scan Revealed Diffuse Parenchymal Calcification In Pancreas Most Likely Sequelae Of Chronic Pancreatitis.

Endoscopic Ultrasound (Eus) With A Curvilinear Scope And Eus Guided Aspiration Was Performed With A 22g Aquire Needle And Serous Looking Fluid Was Drained From Loculi, Which Was Clear And Non-Viscous. String Test Was Negative. The Fluid Was Sent For Analysis, Which Revealed Findings Consistent With Multiloculated Pancreatic Pseudo Cyst.

It Was Important To Have Pre-Operative Diagnosis Before Considering Any Surgical Intervention. Eus Is Low Risk And Surgical Approach Has Complications. Cystic Fluid Analysis Gives A Definitive Diagnosis And Helps In Management. Conservative Management Can Be Offered Only When Malignancy Is Excluded.

So We Conclude That Eus Is A Powerful Tool That Helps In The Diagnosis And Management Of Pancreatic Pseudo Cyst. Eus Not Only Has Low Risk Of Complication But Also Prevent Surgical Intervention And Its Complication.

Op27

Vitamin D Deficiency Among Inflammatory Bowel Disease Patients In Albania.

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Background And Purpose

Vitamin D Insufficiency And Deficiency Is A Common Occurrence In Patients With Inflammatory Bowel Disease (Ibd). The Aim Of This Study Is To Evaluate The Prevalence Of Vitamin D Insufficiency And Deficiency Among Ibd Patients And Healthy Controls In Our Country.

Methodology

This Is A Prospective Study Carried Out From 2016-2020 And Included 96 Consecutive Ibd Patients. As A Control Group, We Analyzed Medical Records Of Healthy Volunteers Who Had Done Their Regular Check-Up. Its Levels Were Considered As: Normal >30 Ng/MI, Insufficient 10-30ng/MI, And Deficient <10ng/MI. They Were Further Divided In Two Categories: Normal Vs Low (>30 Ng/MI Vs ≤30 Ng/MI). Chi-Square Test Was Used For Statistical Analysis.

Results

96 Ibd Patients [82 Ulcerative Colitis (Uc), 14 Crohn's (Cd)] And 563 Controls Were Included In This Study. There Was No Significant Difference On Regard Of Age (43.5±15.8 Vs 46.6±15.2) And Gender Among Two Groups. No Association Was Found Between Vitamin D Level (Normal Vs Low) In Relation To Age (P=0.076) Or Gender (P=0.529) Among The Two Groups.

Vitamin D Among Ibd Group Ranged From 3-58 Ng/MI, With A Mean Level Slightly Lower In Cd Than In Uc (17.5±12.4 Vs 18.1±9.5, P=0.826). Mean Vitamin D Level Was Significantly Lower In Ibd Than In Control Group (18±9.9 Vs 23.8±11.1, P=0.001). Vitamin D Deficiency Was Significantly Higher In Ibd Patients Than Control Group (22.6% Vs 6.6%, P<0.0001). No Statistically Significant Difference Was Observed On Regard Of Vitamin D Insufficiency Among The Two Groups (66.7% Vs 70.9% Respectively, P= 0.405)

Conclusions: Vitamin D Inadequacy, Particularly Its Deficiency Is Frequent In Ibd, Thus Vitamin D Screening Should Be Advised In All Ibd Patients. Our Study Showed Its Insufficiency Even In Healthy Controls, Although We Are A Mediterranean Country.

Total Robotic Median Arcuate Ligament Release

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Background And Purpose

Median Arcuate Ligament (Mal) Syndrome Is A Very Rare And Difficult Diagnosis To Make Due To Its Nonspecific Symptoms And Presentation. We Present A Rare Case Of Significant Stenosis Of The Celiac Trunk By The Arcuate Ligament Operated By Robotic Technique

Case Report

Male Patient, 76 Years Old, Vomiting With Abdominal Post Prandial Pain Refractory To Clinical Treatment. Patient With Several Comorbidities Including 3 Cardiac Stents, 3 Previous Abdominal Surgery And Obesity. At Examination, Her Abdomen Was A Distended, Painful To Palpation On Epigastric Region. He Was Submitted To An Upper Digestive Endoscopy With No Changes. Computed Tomographic Angiography Of The Abdominal Aorta Showed An Accentuated Stenosis In The Emergence Of The Celiac Trunk Determined By The Arcuate Ligament, Presents Good Distal Opacification. Collateral Circulation Is Associated In The Pancreatoduodenal Arch. The Patient Was Submitted To Robotic Surgery. The Upper Retroperitoneum Was Exposed By Incision Of The Gastrohepatic Ligament. The Location Of The Common Hepatic Artery And Left Gastric Artery Were Identified. Intraoperatively, The Clear Extrinsic Nature Of Compression Of The Celiac Trunk By The Diaphragmatic Structures Was Well Assessed Visually And Compressing Pathologic Muscular Fibers Were Divided The Ligament Was Excised With Resection Of The Neural And Fibrotic Tissues Surrounding The Aortic And Visceral Vessels Careful Dissection Along The Adventitial Plane Of The Celiac Trunk Allowed Elevation Of The Mal Ligament. Patient Improved With No Intercurrence And Was Discharged On The Second Postoperative Day.

Conclusions

Surgical Treatment Should Be Considered For Patients With Severe Stenosis Of The Celiac Trunk. Use Of The Da Vinci Surgical System Provides An Additional Minimally Invasive Approach That Appears To Have The Benefits Of Improved Visualization And Ease Of Dissection In Addition To Outcomes Approximating Those Of Laparoscopic Techniques.

Eus-Guided Restoration Of Bowel Continuity After Complete Postoperative Lumen Obliteration: A Case Report

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Background And Purpose

Reconstructive Operations On The Colon Remain A Difficult Issue. The Stricture Of Intestinal Anastomosis Is The Common Adverse Event, Sometimes Up To Complete Obliteration.

Methodology. Recent Advances In Interventional Endoscopy Made It Possible To Create Anastomoses Using Eus-Guided Metal Stents. However, The Recommended Timing Of Stent Removal In Patients With Benign Strictures Remains Controversial.

Results And Discussions

A 42-Year-Old Patient Was Admitted With Postoperative Sigmoid Stricture With Complete Lumen Obliteration. Two Years Ago He Got Two Shots In The Abdomen Damaging The Transverse Colon, Small Intestine, Rectum And Gallbladder . He Underwent Small Intestine Resection And Transversostomy With Partial Colon Resection. Rectum Injury Could Not Be Closed Intraoperatively, So Sigmotomy Was Performed. After The Operation, A Rectum Stricture Developed, An Anterior Resection Of The Rectum Was Performed. However A Year After Complete Obliteration Of The Lumen Of The Rectum Was Revealed.

In Total, The Patient Underwent 4 Operations In 21 Months. The Decision To Attempt Eus-Guided Restoration Of Bowel Continuity Was Taken.

The Echoendoscope Was Inserted Through The Stoma Into Sigmoid Colon. The Rectal Stump Was Filled With Water Then The Rectal Lumen Was Punctured Using A Cystotome Under Eus Control. After Dilation A Lams (Lumen-Apposing Metal Stent) Was Installed In The Formed Channel.

Thus, A Rectosigmoid Anastomosis Was Formed. No Postoperative Complications Occur. The Stent Was Removed After 1 Month. After Its Removal, A Formed Anastomosis About 1 Cm In Diameter Is Clearly Visible.

Within 6 Months, 3 Sessions Of Bougienage And 3 Sessions Of Balloon Dilatation Were Performed. Finally A Stable Anastomosis Lumen Of More Than 10 Mm Had Been Achieved, Whereafter The Fistula Closure Was Performed. To Date, The Stricture Is Not Clinically Significant.

Conclusions

Eus-Guided Restoration Of Bowel Continuity Is Safe And Feasible Prosedure Wich Can Be Perform In Complicated Surgical Cases

Automatic Diagnosis Of Mucinous Pancreatic Cystic Lesions In Endoscopic Ultrasound Using Artificial Intelligence: A Pilot Study

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Background And Purpose

Pancreatic Cystic Lesions (Pcls) Are Common Findings In Clinical Practice. These Lesions Have Varied Etiology And Are Associated With Increased Risk Of Malignancy, Although This Occurs Almost Exclusively In Mucinous Lesions. Endoscopic Ultrasound (Eus) Plays A Pivotal Role In The Characterization Of These Lesions. Nevertheless, Its Accuracy For Differentiating Of Mucinous From Non-Mucinous Lesions Varies Significantly (48-94%). The Introduction Of Artificial Intelligence (Ai) To Endoscopic Practice Has Provided Promising Results. Convolutional Neural Networks (Cnns) Are Highly Efficient Ai Tools For Image Analysis. We Aimed To Develop A Cnn-Based Model For Automatic Diagnosis And Differentiation Of Mucinous Pcls Using Eus Images.

Methodology

We Developed, Trained, And Validated A Cnn-Based On Eus Images. Each Frame Was Labelled As A Mucinous (Intraductal Papillary Mucinous Neoplasm Or Mucinous Cystic Neoplasm) Or Non-Mucinous (Serous Cystadenoma Or Pseudocyst) Pcl. The Diagnosis Of Mucinous Pcl Was Dependent On Cyst Fluid Analysis And/Or Histopathologic Analysis Of Intracystic Biopsies Or Surgical Specimens. The Entire Image Dataset Was Split Into Training (80%) And Validation (20%) Datasets, The Latter Used To Evaluate The Performance Of The Model. The Sensitivity, Specificity, Positive And Negative Predictive Values (Ppv And Npv, Respectively), Accuracy And Area Under The Curve Were Calculated.

Results

A Total Of 5505 Images From 28 Eus Exams Were Included (3725 Of Mucinous Pcls And 1780 Of Non-Mucinous Pcls). The Model Had An Overall Accuracy Of 98.5%, A Sensitivity Of 98.3%, A Specificity Of 98.9%, A Ppv Of 99.5% And A Npv Of 96.4%. The Auc Was 1.00. The Image Processing Speed Of The Cnn Was 191 Frames/Second.

Conclusions

In This Pilot Study We Developed A Deep Learning Algorithm For Automatic Differentiation Of Mucinous From Non-Mucinous Pcls Using Eus Images. Subsequent Development Of These Tools May Contribute To Enhance The Diagnostic Performance Of Eus In The Characterization Of Pcls.

Conservative Therapy For Chyloretroperitoneum: Case Report

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Background And Purpose

Lymphatic Fistula Occurs When The Lymph Passage Is Obstructed Or Ruptured. In The Retroperitoneal Cavity Lies The Cisterna Chyli And Lymphatic Trunk.

Objective: Report A Rare Case Of Chyloretroperitoneum Approached With Conservative Therapy.

Case Report: A 49-Year-Old Male Patient Born And From Spain With No Comorbidities Or Previous Surgical Procedures Was Admitted In The Emergency Room With A High Intensity Pain On The Right Hypochondrium Irradiating To The Right Lumbar Region. Examination Showed Good Medical Condition, Abdomen Soft And Tender At Diffuse Palpation. Inflammatory Acute Abdomen Was Considered As The Main Diagnostic Hypothesis. Abdominal Ct Described Possible Primary Retroperitoneal Fasciitis. The Patient Was Hospitalized Due To The Incompatibility Of The Clinical And Radiological Evaluations And It Was Decided To Perform An Abdominal Mri. The Mri Results Put To Question The Possibility Of Rupture Of A Retroperitoneal Lymphatic Duct, Therefore A Complementary Lymphangiography Was Performed Which Confirmed A Rupture Of The Lymphatic System To The Retroperitoneum, A Dilated Chyle Cistern, With Filiform Structures Within It That Probably Obstruct The Thoracic Duct Outflow Tract. The Images Were Obtained Approximately 1 Hour After The Start Of The Injection, Demonstrating Extravasation Of Contrast Into The Retroperitoneum. He Showed Improvement In The Pain After 48 Hours Of Medication And A Low-Fat Diet. A Search For Filariasis Was Carried Out And Empirical Doxycycline Was Chosen Until The Test Result, Which Was Negative, Came Back. He Is Currently Under Outpatient Follow-Up.

Discussion

Treatment Depends On The Etiology. It Should Be As Conservative As Possible. Recommended Treatments Are As Follows. Diet (Rich In Protein And Low In Fat, Supplemented With Medium-Chain Triglycerides, Prioritizing The Oral Route Whenever Possible).

Conclusions

The Management Of Chyloretroperitoneum Should Be Individualised. Further Studies Of Multicentre Clinical Trials Involving More Patients Are Suggested, To Compare The Efficacy Between This Regimen And The Others.

Op32

Ibd And Sexuality : A Prospective Study

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Introduction

Inflammatory Bowel Diseases (Ibd) Have A Significant Impact On Quality Of Life. Clinical And Endoscopic Remission Should Not Disregard The Evaluation And Management Of Disease Psychosocial Impact. Sexuality Is An Important Aspect Of The Physical And Moral Social Well-Being Of Patients, And Which Is Rarely Addressed In Consultation.

Our Study Aims To Assess The Impact Of Inflammatory Bowel Disease On The Sexuality Of Patients.

Materials And Methods

Its A Descriptive And Analytical Prospective Study In University Hospital Of Rabat; August 2021 And November 2021

We Included All Ibd Outpatients And Excluded Hospitalized Patients, Patients Who Refused To Join The Study And Patients Under 18 Years Of Age

We Studied The Different Aspects Of Sexuality Including: Desire, And Frequency Of Intercourse.

Statistical Analysis Was Performed Using Spss20.0 Software.

Results

42 Patients Were Included.

Mean Age Was 47 Years Old [30-63], With A Sex Ratio F/M = 1.1.

32 Patients (74.4%) Had Crohn's Disease And 10 Patients (23.3%) Uc. 7 Patients (16.3%) Presented Active Ano-Perineal Lesions (Apl) And 5 Patients (24%) Had Already Been Operated.

13 Patients (28.1%) Report A Decrease In The Number Of Intercourses Per Month. A Decrease In The Desire Was Also Reported In 12 Patients (27.9%), Only 9 Patients (18.6%) Expressed Their Need For Help.

In Multivariate Analysis, Only The Apl Are Predictive Of Decreased Desire And Decreased Number Of Intercourses With: (Or: 2.7, 95% Ci [1.28-5.92], P: 0.009) And (Or: 1.8, 95% Ci [1.58-4.98], P <0.001). The Socio-Economic Level, As Well As Education Level Were Not Associated.

Conclusion

More Than Half Patients Present An Alteration Of Their Sexuality, Anoperineal Lesions Are The Most Associated With Impaired Sexuality.

Sexual Health Problems Should Be Screened And Addressed In Consultation Since Only 18.4% Of Patients Express A Need For Help

The Relevance Of Urokinase-Type Plasminogen Activator In Pathogenesis Of Ulcerative Colitis

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Aims

Although Several Angiogenesis-Related Factors Are Reportedly Involved In The Pathogenesis Of Ulcerative Colitis (Uc), The Mechanisms By Which They Contribute To Disease Are Unclear. We Examined The Expression Of Many Angiogenesis-Related Factors In Inflamed Colorectal Tissue Of Uc Patients Using Antibody Array, And Ultimately Found The Highest Expression Of Urokinase-Type Plasminogen Activator [Upa]. We Examined The Localization Of Upa In Inflamed Colorectal Tissue, And Then Investigated The Relevance Of Upa In The Pathogenesis Of Uc Using Upa Knockout (Upa^{-/-}) Mice.

Methods

Expression Of Angiogenesis-Related Factors In Colonic Tissue Of Uc Patients Was Analyzed Using Antibody Array And Real-Time Pcr. The Localization Of Upa In Colitis Tissue Was Determined By Immunohistochemistry Using Mirror Section. The Upa^{-/-} Mice Were Given 2% Dss In Drinking Water For 7 Days And The Colitis Was Evaluated.

Results

The 5 Angiogenesis-Related Factors With The Highest Expression In Human Inflamed Colorectal Tissue Were Upa, Matrix Metalloproteinase-8, Angiostatin/Plasminogen, Hepatocyte Growth Factor And Endoglin. The Mrna Level Of Upa Was Significantly Higher In Colitis Tissues Than In Normal Tissues Obtained From Additional Uc Patients With The Lowest P-Value, And Correlated With The Severity Of Uc. Immunohistochemistry Revealed That Upa Was Expressed In The Neutrophils Of Colitis Tissues. The Disease Activity Index And Histological Score Of Colitis Tissues Were Obviously Lower In Upa^{-/-} Mice Than In Upa^{+/+} Mice. Among 23 Cytokines Examined, Il-12, Gm-Csf, Il-5 And Rantes Was Significantly Downregulated In The Colitis Tissues From Upa^{-/-} Mice.

Conclusions

Upa Was Highly Expressed In Neutrophils Of The Inflamed Mucosa Of Uc Patients, Which Expression Level Correlated With The Severity Of Uc. Our Data Suggest That Upa Plays An Important Role In Pathogenesis Of Uc Through Down Regulation Of Several Cytokines Including Il-12. Upa Can Be A Potent Target Molecule For Anti-Inflammatory Agents In Uc.

Transmural Remission By Gi Ultrasound (Gius) Predicts Outcome After One Year In Crohn's Disease

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Background And Purpose

Gastrointestinal Ultrasound (Gius) Can Be Used To Measure Bowel Wall Thickness (Bwt), Which May Indicate Disease Activity. The Aim Of This Study Was To Investigate Whether Normalisation Of Bwt In Crohn's Disease (Cd) Patients Affects Risk For Important Negative Endpoints.

Methods

Patients With Cd Referred To A Tertiary Hospital For Ileocolonoscopy Were Examined With Gius And Followed For 12 Months. The Clinical Endpoints Examined Were Defined As The Need For Treatment With Corticosteroids, Changes In The Maintenance Treatment, Hospital Admissions, And Surgical Procedures Related To Crohn's Disease. Patients Were Categorized Into 3 Groups According To Their Findings On Endoscopy And Gius: The Activity Group (A) Consisted Of Patients With Activity On Gius Defined As Any Bowel Wall Segment ≥ 3 mm And Simple Endoscopic Score Of Crohn's Disease (Ses-Cd) > 2 . The Group In Transmural Remission (B) Was Defined As All Patients With Bwt < 3 mm Independent Of Findings On Endoscopy. The Final Group (C) Consisted Of The Patients With Isolated Endoscopic Remission Defined As Ses-Cd ≤ 2 And Bwt ≥ 3 mm In One Or More Bowel Segment.

Results

155 Cd Patients Were Included In The Study. In Total 61/155 Patients Experienced One Or More Negative, Clinical Endpoint During The One Year Follow Up Period. 9/155 Received Treatment With Corticosteroids, 50/155 Had Adjustments In Their Medical Therapy, 32/155 Were Admitted To The Hospital At Least Once And 18/155 Had Surgery. In Group A, 44/92 Experienced One Or More Endpoints While The Corresponding Numbers Were 9/40 In Group B And 8/23 In Group C. The Frequency Of Clinical Endpoints Were Significantly Different Between The Different Groups ($P=0,020$, Fischer's Exact Test). Only Patients In Group A Underwent Surgery.

Conclusions

The Group With Transmural Remission Had Fewer Patients With Negative Clinical Endpoints Which Implies That Gius Can Predict Prognosis In Cd Patients.

Influence Of An Increase In Eosinophilic Cationic Protein On The Course Of Inflammatory Bowel Diseases

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Inflammatory Bowel Diseases (Ibd) Are A Group Of Immune-Inflammatory Diseases Characterized By A Relapsing Course Of The Disease. The Search For A Potential Role Of Eosinophils In The Formation Of Inflammation And Fibrosis In Patients With Ibd Is Relevant.

Purpose Of The Study: To Identify The Effect Of An Increase In The Level Of Eosinophilic Cationic Protein (Ecp) On The Course Of Inflammatory Bowel Diseases.

Materials And Methods

The Study Was Conducted From January 2016 To April 2022, Among 400 Patients With Ibd (Mc N=12; Uc N=150; Cd N=238). Patients Underwent Endoscopy With Biopsy Sampling For Pathomorphological Examination, As Well As Laboratory Blood Tests (General Blood Count, H/Scrp, Homocysteine, Vitamin D, Anca-Test, A-Thf, Il-1 β , -2, -4, -6, -8, -10, -18, Total Protein, Albumin, Iron, Ferritin, Ecp, IgE; Urinalysis And Urine Albumin; Stool And Fecal Calprotectin, Lactoferrin).

Results

In 250 Patients (62.5%) With A Poor Response To Basic Therapy, A Study Was Conducted On Ecp And In 69 Cases (27.6%) The Result Was Positive, The Number Of Positive Endoscopic Manifestations Was 190 (76%), The Number Of Patients With A Positive Pathological Conclusion For The Presence Of Eosinophils In The Biopsy Material - 95 (38%), The Number Of Patients With Concomitant Allergic Diseases - 14 (5.6%/20.2%). The Level Of Ecp Fluctuated Within 29-228 Ng/MI (N<24 Ng/MI).

In The Statistical Processing Of The Results Obtained, The Generally Accepted Methods Of Descriptive Statistics Were Used With The Calculation Of The Arithmetic Mean Values Of The Trait (M), Standard Deviation (Σ), Mean Error (M), Student's Coefficient (T), Error Probability (P).

Conclusion

The Increase In The Level Of Ecp In The Study Group Of Patients Was 27.6%; There Were Higher Rates For Laboratory, Endoscopic And Morphological Activity Of Ibd.

Considering That Eosinophilia Is Considered A Hallmark Of Early Diagnosis Of Ibd And Closely Correlates With Histologic Diagnosis, As Well As The Role Of Eosinophils In The Formation Of Inflammation And Fibrosis, The Study Of An Increase In Ecp Is Of Interest In The Context Of The Marker Of "Non-Response" To Basic Therapy In Ibd And In The Search For New Targets For Treatment.

Adiponectin Levels In Inflammatory Bowel Disease – A Systematic Review And Meta-Analysis

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Background And Purpose

As Adipose Tissue Plays An Essential Role In The Pathophysiology Of Inflammatory Diseases, Several Studies Evaluated Adipokines, Cytokines Secreted By Adipose Tissue, In Inflammatory Bowel Disease (Ibd). However, The Findings Were Inconsistent. Therefore, We Aimed To Investigate Adiponectin Levels In Ibd Patients.

Methods

Using Predetermined Keywords, We Carried Out A Comprehensive Electronic Search On Pubmed, Embase, Scopus, And Cochrane Library. We Included Human Observational Or Interventional Studies That Assessed The Levels Of Serum Or Plasma Adiponectin In Ibd Patients. We Only Included Full-Text Articles That Met Our Inclusion And Exclusion Criteria. The Mean Difference (Md) In Serum Or Plasma Adiponectin Levels Between Ibd Patients And Controls Was The Principal Summary Outcome. Quality Assessment Of Included Studies Was Conducted Using The Nhlbi Quality Assessment Tools According To Each Study Design.

Results

Our Qualitative And Quantitative Synthesis Included Findings From 20 And 14 Studies, Respectively, With A Total Population Sample Of 2085 Participants From North Africa, The Americas, Asia, And Europe. None Of The Comparisons Between Ibd Patients And Controls Showed A Significant Md In Serum Adiponectin Levels (-1.331 [95% Ci -3.135–0.472]), As Well As Subgroup Analyses Of Uc Patients Vs. Controls (-0.257 [95% Ci -1.959–1.445]), And Cd Patients Vs. Controls (-0.851 [95% Ci -2.263–0.561]). Nevertheless, A Significant Md (0.859 [95% Ci 0.097–1.622]) Was Observed Between Uc Patients And Cd Patients. According To The Results Of Our Conducted Quality Assessment Of Included Studies, A Total Of 17 Studies Were Rated As "Fair", 2 Studies As "Poor", And 1 Study As "Good".

Conclusions

Ibd Patients, Including Uc And Cd Could Not Be Distinguished From Controls Based On Serum Adiponectin Levels. However, Uc Patients Had Significantly Higher Serum Adiponectin Levels Than Cd Patients.

Op37

Paediatric Crohn's Patients : Single Center Experience In Tertiary Children's Hospital In Uae

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Background

Crohn's Disease And Inflammatory Bowel Disease, In General, Have Been Increasing Significantly. For That, Many Modalities Of Treatment Have Shown Promising Results Including Special Diet. In Our Study, We Are Looking At Crohn's Disease Dietary Management For Induction And Subsequently Maintenance Of Treatment. The Main Question Was How Feasible Was Applying This Approach And What Difficulties The Patient And His Parents Faced.

Methodology

We Have Reviewed The Patients Using The Electronic Medical System. We Had 28 Pediatric Patients Who Were Diagnosed With Crohn's Disease And Used The Diet Plan To Induce Remission Or Maintenance. Then, We Used A Questionnaire That Was Filled Up By Both Parents And The Patient Regarding The Difficulties They Faced While Using The Special Diet. Lastly, Data Was Reviewed And The Main Findings Were Highlighted Using Basic Measures (Mean, Mode And Average).

Results And Discussions

We Have Found That The Cohort Had Used The Special Diet For A Various Duration Ranging From 2 Weeks Up To 2.5 Years. In 39% Of The Cases, A Special Diet Was Initiated Before The Use Of Medications And Biological Agents. All Patients Opted To Start With Crohn's Disease Exclusion Diet Which Provided 50 % Of Calories By Milk. The Response Was Inconsistent Due To Poor Compliance. Only 57 % Of The Patients Were Able To Bear With The Dietary Plan Beyond 12 Weeks. Patients Reported The Following Factors Which Caused Non-Compliance: Lack Of Family Support (71%) Cost (64%), Intolerance (14%), Poor Follow-Up Plan (7%), And Others.

Conclusions

Dietary Management Of Patients With Crohn's Disease Is An Effective Treatment Modality With A Very Good Safety Profile. Unfortunately, Many Factors Might Contribute To Poor Compliance And Failure Of Treatment. We Must Address These Factors To Improve The Compliance Of This Treatment Modality And Use It More Frequently.

First Line Biologic Takes The Glory: Our Experience.

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Background And Purpose

Studies Showed That Early Introduction Of Biologics Provides Better Results In Achieving And Maintaining Remission. Our Aim Was To Show The Difference Between The Duration Of Remission Regarding The Line Of Biologic Treatment In Our Cohort Of Patients.

Methodology

We Searched Database Of All Patients Treated With Biologics Until Nov 2019 At The Department Of Gastroenterology And Hepatology Of Clinical Hospital Center Osijek. We Gathered Data On Diagnosis, Time From Diagnosis To Start Of The First Biologic, Number And Type Of Biologics Used, Duration Of Treatment With Each Biologic, And The Reason For Discontinuation. Data Was Analyzed By Descriptive Statistics.

Results And Discussions

In Total, 203 Patients Were Treated With Biologics At Our Department, 140 (69%) With Crohn's Disease, 58 With Ulcerative Colitis (28.6%) And 3 With Refractory Pouchitis (1.5%). Most Used First Line Biologic Was Infliximab (122 Patients Or 60.1%) Then Adalimumab (51 Patients Or 25.1%). Biologics Were Started Within 5 Years From Diagnosis In Majority Of Patients (126 Patients, 66%), Of Which 88 Patients Started Biologics Within 2 Years From Diagnosis. Majority Is Still Treated With First Line Biologic (107 Patients, 52.7%) With Median Duration Of Treatment Of 42.5 Months (Min 5, Max 160). Duration Of Treatment Is Progressively Shortening For Second, Third And Fourth Biologic (Median 25 Months, Min 1, Max 120; Median 9 Months, Min 1, Max 41; Median 8 Months, Min 2, Max 17, Respectively). The Most Common Reason For Termination Of Therapy With First And Second Biologic Is Loss Of Response (In 52.4% And 56.8% Of Patients, Respectively), And For Third Biologic Is Primary Non-Response (50% Of Patients).

Conclusions

Our Data Show That First Line Biologic Is Most Efficient With Longest Duration Of Treatment Period. Also, We Have Confirmed That Earlier Introduction Of Biologics Is Essential In Achieving Sustained Remission.

Op39

Validation Of Stricture Length, Duration And Obstructive Symptoms As Predictors For Intervention In Ileal Stricturing Crohn's Disease

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Background And Purpose

The Natural History Of Terminal Ileal (Ti) Stricturing Crohn's Disease (Cd) Is Poorly Defined. Novel And Rigorous Definitions For Ti Strictures Recently Became Available.

We Aimed To Describe The Rates And Predictors Of Symptoms, Endoscopic Balloon Dilation (Ebd) And Surgery In A Well-Defined Stricturing Cd Cohort.

Methodology

A Cohort Of Consecutive Adult Patients With Non-Penetrating Stricturing Terminal Ileal Cd Were Included. Ti Strictures As Defined By Centrally-Read Mre Constrict Criteria Were Separated Into A Derivation (N=58) And Validation (N=28) Cohort. Clinical And Imaging Characteristics Were Collected Following Prespecified Scoring Conventions. Primary Outcome Was A Composite Endpoint Of Ebd Or Surgery ("Intervention").

Multivariable Analysis Was Performed.

Results And Discussions

Eighty-Six Patients (48.8% Female, Median Age 36 Years) Met Selection Criteria, 17.4% Had Prior Ebd, 59.3% Previously Received Biologics And 58.1% Of Strictures Were Anastomotic. Median Follow-Up Was 56.3 [95% Ci: 50.3 - 59.8] Months. At 12 And 48 Months, 29% And 50% Of Patients Had Intervention, Respectively. Multivariable Analysis Showed Obstructive Symptoms (Hazard Ratio (Hr) 1.444; 95% Ci 1.126 - 1.852), Stricture Duration (Hr 0.974; 95% Ci, 0.954 – 0.995) And Length (Hr 1.039; 95% Ci, 1.011 – 1.069) Predicted Intervention. The Concordance Index For Split-Sample Validation Was 0.74 And 0.67, Respectively. Biologics Were Not Associated With Intervention.

Conclusions

In Patients With Ti Stricturing Cd, 29% And 50% Required Intervention At 1 And 4 Years. Obstructive Symptoms, Stricture Duration And Length Were Independent And Validated Predictors Of The Need For Intervention. These Findings Are Important For Clinical Practice And Aid In The Design Of Future Trials For Cd Strictures.

Op40

Tofacitinib In Pediatric Ulcerative Colitis: A Retrospective Multicenter Experience From The Paediatric Ibd Porto Group Of Espghan

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Background And Purpose

Tofacitinib, A Janus Kinase (Jak) Inhibitor, Has Recently Been Approved For The Treatment Of Moderate To Severe Active Ulcerative Colitis (Uc) In Adults. Data On Efficacy And Safety In Pediatrics Are Limited. In This Multicenter Study From The Paediatric Ibd Porto Group Of Espghan, We Describe The Short-Term Effectiveness And Safety Of Tofacitinib In An International Pediatric Ibd Cohort.

Methodology

Retrospective Review Of Children (2-18 Years) Diagnosed With Uc Treated With Tofacitinib From 15 Pediatric Centers Internationally. The Primary Outcome Was Corticosteroid-Free Clinical Remission (Pucal<10) At Week 8, With Secondary Outcomes Including Clinical Response (≥ 20 Point Decrease In Pucal), Colectomy Rate, And Safety. The Primary Outcome Was Calculated Utilizing Non-Response Imputation (Nri), Whereby Drug Cessation For Any Reason Was Considered A Treatment Failure.

Results And Discussions

78 Patients (43 (55%) Female, Mean Age At Diagnosis 12.5 (± 2.7) Years, Median Disease Duration 20 Months (Iqr10.3-38.8)), All With Previous Biologic Failure, Including 20/78 (26%) With The Previous Failure Of Three Biologic Classes. 15/78 (19%) Patients Achieved Corticosteroid-Free Clinical Remission At Week 8 With A Further 18/78 (23%) Demonstrating Clinical Response. 9/78 (12%) Underwent Colectomy By Week 8, And 21/78 (27%) By Week 24. Twelve Adverse Events Were Reported Including Five Infectives (Three Of Which Deemed Possibly Related To Treatment – Zoster, Hsv-2 Cheilitis, And Septic Arthritis), One Case Of Pancreatitis, And Abnormal Blood Test Results In 5 Children (Anemia, Lymphopenia, Elevated HepaticTransaminases And Hypercholesterolemia).

Conclusions

In This Largest Real-Life Cohort Of Tofacitinib In Pediatric Uc To Date, Tofacitinib Seemed Effective In At

Least 19% Of Highly Refractory Patients By Week 8. Adverse Reactions And Safety Were Largely Consistent With So Far Published Adult Data.

The Cost Of Illness Analysis Of Inflammatory Bowel Disease

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Background

Inflammatory Bowel Disease (Ibd) Is A Chronic Inflammatory Condition Involves Young Adults. Recent Data Suggests The Increase In The Prevalence Of Ibd And The Surge In The Application Of Biologic Drugs In Which Both Change The Cost Of Ibd In Recent Years. Comprehensive Assessment Of Direct And Indirect Cost Profiles Associated With Inflammatory Bowel Disease In Our Area In Scarce. In This Study, We Aimed To Determine The Economic Burden Of Ibd In Iran From Societal Perspective, Using Cost Diaries.

Methods

Patients Available On Clinic Registry And Hospital Information System, Who Had Been Diagnosed With Ibd, Were Invited To Participate In This Study. Demographic And Clinical Data, The Number Of Healthcare Resource Utilization, Absenteeism For Patients And Their Caregivers Were Obtained Face-To-Face Or Through Phone Calls. Item's Costs Were Derived From Local And National Sources. Furthermore, The Data Regarding Premature Mortality In Ibd Patients Was Extracted From Hospital Information System. Then, Cost Date Were Calculated As Mean Annual Costs Per Patient.

Results

The Cost Diaries Were Obtained From 240 Subjects (Ulcerative Colitis: N = 168, Crohn's Disease, N = 72). The Mean Annual Costs Per Patient Were 1077 Us\$ (95% Ci 900-1253), And 1608 (95% Ci 1256, 1960) For Patients With Ulcerative Colitis And Crohn's Disease, Respectively. Of The Total Costs, 58% And 63% Were Due To Indirect Costs For Patients With Ulcerative Colitis And Crohn's Disease, Respectively. Highest Nationwide Economic Burden Of Ibd Was Found For Patients Older Than 40 Years Were Estimated To Be 8,198,519 Us\$ And 7,120,891 Us\$, For Ulcerative Colitis And Crohn's Disease, Respectively.

Conclusion

In This Study, Medication Was Found To Be The Greatest Contributor Of Direct Medical Costs. Furthermore, Productivity Loss Due To Long-Term Disability And Premature Mortality Were Major Components Of Inflammatory Bowel Disease Burden In Iran.

Op42

Prevalence Of Helicobacter Pylori Infection In Organic Bowel Disease Patient At Dr Cipto Mangunkusumo National General Hospital 2010-2021

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Background And Purpose

Recent Meta-Analyses Showed Contrasting Associations Between Helicobacter Pylori Infection And Organic Bowel Disorders, Where Positive Associations Were Reported In Colorectal Carcinoma (Crc) And Colorectal Polyp Patients While A Protective (Negative) Association Was Observed In Patients With Inflammatory Bowel Diseases (Ibd). We Aim To Determine The Association Between H Pylori Infection And Crc, Colorectal Polyp, And Ibd In An Indonesian National Referral Hospital.

Methodology

We Retrospectively Collected Data Of Patients Referred To Cipto Mangunkusumo National General Hospital, Jakarta, Indonesia, From 2010 To 2021, With Complete H Pylori Test And Lower Endoscopy From Electronic Medical Record. We Performed A Chi-Square Analysis And Logistic Regression To Determine The Association Between H Pylori Infection And Organic Bowel Disorders With A Significant Two-Tailed P-Value Of <0.05.

Results And Discussions

Three Hundred Consecutive Patients Were Enrolled, With A Mean Age Of 49.5 (Standar Deviation 15.68), And 120 (40%) Of Them Were Males. Overall, The Prevalence Of H Pylori Infection In Organic Bowel Disease Was 15% (N=45) With 8,9% Of Them Has Crc, 17.8% Colorectal Polyp, And 17.8% Ibd. A Negative Association Between H Pylori Infection And Ibd Was Observed [Or 0.39 (0.17-0.87), P=0.02]. However, No Significant Association Was Found Between H Pylori Infection And Crc [Or 0.82 (0.27-2.48), P=0.73], And Colorectal Polyp [Or 0.77 (0.34-1.74), P=0.69].

Conclusions

Our Study Suggested A Protective Association Of H Pylori Infection In Ibd Patients In An Indonesian Tertiary Referral Hospital. However, Insignificant Association Was Observed Between H Pylori Infection And Crc, And Colorectal Polyp.

Op43

Improvement In Health Related Quality Of Life And Patient Satisfaction After Pneumatic Dilatation In Achalasia Patients: Results Of A Prospective Follow Up

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Background

Achalasia Is A Benign But Debilitating Primary Esophageal Motility Disorder Which May Have A Detrimental Effect On Quality Of Life. Improvement Of Symptoms Is The Main Goal Of Therapy. Pneumatic Dilatation (Pd), Per Oral Endoscopic Myotomy, Heller's Myotomy And Botulinum Toxin Injections Are The Treatment Options.

Aims & Objectives

Our Aim Was To Objectively Determine The Changes In Health Related Quality Of Life In The Long Term Clinical Course Of Patients After Pneumatic Dilatation.

Methods

A Hospital Based Quasi Interventional Study Was Conducted From May 2018 To December 2021. We Followed Clinical Status Of Patients Who Had Pd For Achalasia. All Patients Were Followed Up Periodically For A Minimum Of 2yrs. Structured Interviews Were Conducted Regarding Symptoms Severity, Health Related Quality Of Life And Patient Satisfaction Using Sf-8tm Health Survey Questionnaire (Minimum Score 0, Max Score 42) And Achalasia Severity Eckardt Score (No Symptom= 0 , Max Symptom Severity=12). Scores Were Presented As Median With Interquartile Range. Wilcoxon Signed Ranked Test Was Used For Statistical Analysis.

Results

40 Patients (55% Males, 45% Females) Were Treated By Pd. Mean Age Was 37 + 10yrs. On Evaluation, Pd Was Found To Be Very Effective In 37/40 Patients (92.5%). Only 3 Patients Required A 2nd Session Of Pd Over This Time Interval. No Significant Immediate Or Late Complication Was Noted. There Was Post Procedure Significant Improvement (P Value <0.05) In Achalasia Severity Eckardt Scores (10 Vs 2) As Well As Sf8 Tm Health Survey Scores (16 Vs 36) In The Follow Up Period.

Conclusion

Pd Is An Effective And Safe Long Term Therapy For Achalasia Patients. It Improves Health Related Quality Of Life And Patient Satisfaction In Long Term Follow Up.

Op44

Duodenal Laser Ablation For The Treatment Of Type 2 Diabetes: Preliminary Results Of First-In-Human Clinical Study

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Introduction

Type 2 Diabetes (Dm) Is A Severe Condition With The Continuous Incidence Rising, Impacting Individual Health, Quality Of Life, And Healthcare Burden. Bariatric Surgeries That Bypass The Duodenum Have Improved Glycemic Control In Dm Population. Improvement In Glycemic Control Begins Immediately Post-Surgery Before Any Weight Loss Associated Benefits And Remains Durable For Years Post-Procedure.

Methodology

Endoscopic Glycemic Management (Egm) (Digma System, Digma Medical Ltd., Israel) Is A Procedure Performing Serial Laser Ablations Of The Duodenal Submucosa. Procedure Selectively Blocks Neuronal Signals In The Submucosal Plexus, Interrupting Both Direct And Indirect Nutrient Sensing And Signaling.

Patients & Methods

The Main Aim Of Our First-In-Human Clinical Study Was To Assess Efficiency And Safety Of Egm Procedure In Patients With Type 2 Diabetes.

Results

In The Period Of Two Years, We Enrolled Altogether 31 Patients With Dm, Where We Performed Egm Procedure. All Patients Were Treated Only With Peroral Antidiabetics With Type 2 Diabetes Duration Less Than 15 Years And All Subjects Were Maintained On Stable Antidiabetic Medication Throughout Follow-Up. All 31 Subjects Completed The Procedure Successfully And There Were No Device Or Procedure Related Adverse Events Reported In The Study, Demonstrating Initial Safety And Feasibility Of Egm Therapy. Twenty-One (21) Subjects In The Therapy Cohort Completed 6 Months Follow-Up With Mean Hba1c At Baseline Of 8.9% Reduced To 8.3% (-0.6%, P = 0.014, 95% Ci [-1.1%, -0.1%]). Eighteen Subjects In The Therapy Cohort Completed 12 Months Follow-Up With Mean Hba1c Reduction Of -0.4% (P = 0.062, 95% Ci [-0.8%, -0.0%]). Mean Body Mass Did Not Change Among The Therapy Cohort Subjects Through 6- And 12 Months Follow-Up.

Conclusions

First-In-Human Clinical Study Preliminary Data Show A Promising Future For Egm Therapy As A Modality In Treatment Dm. First Data Show A Strong Safety Profile And Feasibility Of The Egm Procedure.

Op45

Different Protective Effects Of Mucosal Protective Agents For Gastro-Esophageal Reflux In A Human Reconstructed Esophageal Epithelium Model

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Background

Several Mucosal Protective Agents (Mpas) Are Widely Employed To Counteract Gerd Symptoms.

Aim

To Comparatively Assess The Efficiency And Timing Effect Of Three Different Mpas.

Methods

Caffeine And Lucifer Yellow (Ly) Were Used To Assess Epithelial Permeability And Barrier Integrity, Respectively. In An Acidic Environment (Ph 3.3), Three Mpas, Device A (Gerdoff® Protection), Device B (Esoxx® One), And Device C (Marial® Gel) Were Applied To A Prewetted Previously Validated Esophageal Epithelial Ho2e Model1-2 For 15 Min. A 0.5% Caffeine Solution Was Then Applied, And Its Penetration Kinetics Were Assessed At 1h And 2h In Acidic Environments (Ph= 3.3). Caffeine Permeated Into The Basolateral Compartment (Hplc-Uv) And Ly Paracellular Permeability Were Quantified 15 Min After Application Of The Caffeine. At The 15 Min Time Point, Device A Reduced Caffeine Permeation By 77.2% And Ly Flux By 30.4% Compared To The Untreated Control (P<0.05) And With A Faster Mode Of Action Than That Of The Other Devices. Transepithelial Caffeine Flux Was Reduced, Albeit With Different Timing And Efficiency, By All Three Compounds Up To The End Of The 2 Hour Experiment. At 1h, Device A Reduced The Caffeine Flux By 79.2%; Device B, By 67.2%; And Device C, By 37% (P<0.001 Device A Vs B And C). The Barrier Protective Effect Was Significantly Greater (P< 0.0001) At 1h With Device A (0.19% Caffeine Permeation/Min) Than With Device B And Device C (0.30% And 0.57% Caffeine Permeation/Min, Respectively).

Conclusions

The Tested Medical Devices Interact Differently With The Esophageal Epithelium, Being Device A More Efficacious And Faster Acting Than The Other Two Devices, With A Statistically Significant Reduction In The Caffeine Permeation At 1h And 2h, To Exert An Epithelial Protective Effect To Counteract The Noxious Acid Action.

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Op46

Deep Learning And Capsule Endoscopy: Automatic Detection And Differentiation Of Small Bowel Protruding Lesions.

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Background And Purpose

Capsule Endoscopy (Ce) Revolutionized The Study Of The Small Intestine, Overcoming The Limitations Of Conventional Endoscopy. Nevertheless, Reviewing Ce Images Is Time And Resource-Consuming. Convolutional Neural Network (Cnn) Is An Artificial Intelligence Architecture With High-Performance Levels For Image Analysis. Protruding Lesions Of The Small Intestine Exhibit Enormous Morphological Diversity In Ce Images. Our Group Aimed To Develop A Cnn-Based Algorithm For Automatically Detecting Pleomorphic Small Bowel Protruding Lesions.

Methodology

A Cnn Was Developed Using A Pool Of Ce Images Containing Protruding Lesions Or Normal Mucosa/Other Findings. A Total Of 2565 Patients Were Included. These Images Were Inserted Into A Cnn Model With Transfer Learning. Our Group Evaluated The Network's Performance By Calculating Its Sensitivity, Specificity, Accuracy, Positive Predictive Value, And Negative Predictive Value.

Results And Discussions

A Convolutional Neural Network Was Developed Based On A Total Of 21320 Ce Images. Training And Validation Datasets Comprising 80% And 20% Of The Total Pool Of Images, Respectively, Were Constructed For The Development And Testing Of The Network. The Algorithm Automatically Detected Small Bowel Protruding Lesions With An Accuracy Of 97.1%. Our Cnn Had A Sensitivity, Specificity, And Positive And Negative Predictive Values Of 95.9%, 97.1%, 83.0%, And 95.7%, Respectively. The Cnn Operated At A Rate Of Approximately 355 Frames Per Second.

Conclusions

Our Group Developed An Accurate Cnn For Automatically Detecting Protruding Enteric Lesions With A Wide Range Of Morphologies. The Development Of These Tools May Enhance The Diagnostic Yield Of Ce.

Op47

Evaluation Of Therapeutic Effect Of Buspirone In Improving Dysphagia In Patients With Ineffective Esophageal Motility: A Double-Blind Randomized Clinical Trial

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Introduction

Ineffective Esophageal Motility (Iem) Is The Most Common Esophageal Motility Disorder Associated With Low To Moderate Amplitude Contractions In The Distal Esophagus In Manometric Testing. There Are Not Good Therapeutic Interventions For Treatment Of This Disorder. The Aim Of This Study Was To Investigate The Effect Of Buspirone On Iem.

Methods And Materials

The Present Study Was A Double Blind Randomized Clinical Trial Conducted In Imam Khomeini Hospital, Tehran. Patients Were Categorized Based On Random Numbers. Based On Random Score, Patients Were Given A Package Containing The Desired Medication/S. Half Of The Packets Contained 10 Mg (For 30 Days) Of Buspirone And 40 Mg (For 30 Days) Of Pantoprazole, And The Other Half Contained Only 40 Mg (For 30 Days) Of Pantoprazole. Patients' Dysphagia Was Scored Based On Mayo As Well As A Table Of Dysphasia Severity. Manometric Pressure Variables Were Also Recorded Before And After Treatment. Statistical Analysis Was Performed By Spss 26 Software.

Results

30 Patients (15 Pantoprazole And 15 Pantoprazole+ Buspirone) Were Randomly Assigned To Treatment (63.3%Female, Mean Age 46.33±11.15). None Of The Patients Had A History Of Opioid Use. Mayo Score, And Resting Les Pressure Significantly Changed After Treatment. The Mayo Score And Swallowing Disorder Questionnaire Significantly Decreased After Treatment In Both Groups Of Patients.

Conclusion

Treatment Of Iem Using Proton Pump Inhibitors (Such As Pantoprazole) Improves Patients' Clinical Condition And Quality Of Life. However, The Addition Of Buspirone To The Treatment Regimen Does Not Seem To Make A Significant Difference In The Treatment Of Patients.

Op48

Dupilumab Reduces The Emotional And Dysphagia-Related Impacts Of Eosinophilic Esophagitis To Improve Health-Related Quality Of Life

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Background And Purpose

Eosinophilic Esophagitis (Eoe) Substantially Impairs Quality Of Life (Qol). In The Phase 3 Liberty-Eoe-Treet Trial (Nct03633617) Conducted In Patients ≥ 12 Years, Dupilumab 300mg Weekly (Qw) Improved Clinical, Symptomatic, Histologic, And Endoscopic Aspects Of Eoe At Week 24 And Was Generally Well Tolerated. We Report The Effects Of Dupilumab On Qol In Liberty-Eoe-Treet.

Method

In Parts A And B Of Liberty-Eoe-Treet, Patients Were Randomized To Dupilumab 300mg Qw (Part A: 42, Part B: 80) Or Placebo (Part A: 39, Part B: 79) For 24 Weeks. The Eoe Impact Questionnaire (Eoe-Iq) Is A Patient-Reported, Disease-Specific, 11-Item Questionnaire That Measures Impact Of Eoe On Emotional And Social Aspects, Work/School, And Sleep Over A 7-Day Recall Period. It Was Developed In Line With Best Practices And Includes Relevant Eoe Aspects That Affect Qol, Based On Literature Review And Discussion With Experts And Confirmed By Patient Interviews. Patients Rate Each Item On A Scale From 1 To 5 (Higher Scores Indicate Greater Negative Impact On Qol).

Results

At Baseline, The Most Burdensome Effects Of Eoe Were Related To Emotional Impact And Anxiety Around Dysphagia. Dupilumab Showed A Nominally Significant Reduction Vs Placebo In 6 Items In Parts A And B: "Bothered", "Worried About Swallowing", "Worried About Choking", "Worried About Swallowing In Public", "Social Activities", "Sleep Disruption" (All Nominal $P < 0.05$), And 1 Additional Item In Part B ("Embarrassed", Nominal $P < 0.05$). The Largest Placebo-Adjusted Change From Baseline To Week 24 Was Observed In Items Relating To Emotional Impact And Anxiety, Including "Worried About Swallowing In Public" (Part A: -0.90 ; Part B: -0.45), "Bothered" (-0.64 ; -0.53), "Worried About Swallowing" (-0.73 ; -0.65), And "Worried About Choking" (-0.61 ; -0.57).

Conclusions

Dupilumab 300mg Qw Improved Health-Related Qol In Patients With Eoe; Change Was Driven By Improvements In Emotional And Social Well-Being And Sleep.

Op49

Is It Possible To Withdrawal Ppi's Therapy In Gerd Patients? A Prospective Study On 216 Patients Using Hychsa (Gerd-Off)

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Background And Study Aim

Therapy Of Gerd Involves Acid Suppression By Anti-Acid Or Proton Pump Inhibitors; This Schedule Can Fail To Relief Symptoms And Prevent Early Relapse In Nearly 30% Of Cases. We Evaluate The Effect Of A Medical Device, Based On An Oral Combination Of Hyaluronic Acid, Chondroitin Sulfate And Aluminum (Hychsa) In Patients With Gerd, In Comparison With Ppi Treatment.

Patients And Methods

We Selected 216 Patients (118 F, Mean Age 48 Yrs., Range 22-88), With Los Angeles Grade A Esophagitis, Typical Symptoms And Previous History Of Early Relapse. Patients Were Divided In Group A (112 Pts) Undergoing Ppi Full-Dose And Group B (78 Pts) Treated With A Melt-In-Mouth Medical Device (Hychsa, 1100 Mg:Gerd-Off©) Three Times A Day For 3 Months. Clinical Outcome Assessed By Visual Analogical Scale (Vas) And Symptomatic Score (S.S.). Vas And S.S. Collected At Baseline (T0) And After Three Months (T1). In A Second Schedule, 100 Pts From Group A (Group A1) Started A Three Months Therapy Taking Hychsa After Stopping Ppis.

Results

In Group A S.S. Was 2 (T0), And 1 At T1; Vas Was 7 (T0) And 2 At T1. In Group B Treated With Hychsa, S.S. Was 3 (T0) And 2 At T1; Vas Was 6 (T0) And 2 At T1. In Group A1 After 3 Months Taking Hychsa, S.S. Was 2 And Vas 2.

Conclusion

Oral Association Of Hychsa May Represent A Real Alternative To Ppi Therapy In Gerd Pts, By Both Improving Symptoms And Prevent Early Relapse.

Op50

Dupilumab Treatment Leads To Rapid And Sustained Improvements In Dysphagia

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Background And Purpose

Dysphagia Is A Particularly Burdensome Symptom Of Eosinophilic Esophagitis (Eoe). In The Phase 3 Liberty-Eoe-Treet Trial (Nct03633617) In Patients ≥ 12 Years, Dupilumab 300mg Weekly (Qw) Improved Clinical, Symptomatic, Histologic, And Endoscopic Aspects Of Eoe At Week 24 And Was Generally Well Tolerated; Results Were Sustained Up To 52 Weeks. We Present The Effect Of Dupilumab On Dysphagia Symptom Questionnaire (Dsq) Scores In Liberty-Eoe-Treet.

Methods

Liberty-Eoe-Treet Was A 3-Part Trial. In Parts A And B, Patients Were Randomized To Dupilumab 300mg Qw (42 In Part A, 80 In Part B) Or Placebo (39 In Part A, 79 In Part B) For 24 Weeks. From Part A, 40 Dupilumab-Treated And 37 Placebo-Treated Patients Entered Part C To Receive Dupilumab 300mg Qw For An Additional 28 Weeks. Patients Completed The Dsq Daily; Biweekly Total Scores Were Calculated, Range 0–84 (Higher Scores Indicate Greater Dysphagia Frequency And Severity).

Results

Baseline Mean (Standard Deviation [Sd]) Dsq Scores In Parts A And B Ranged From 32.2(12.66) To 38.4(10.70). At Week 4, Least Squares Mean Change From Baseline In Dsq Total Score (Standard Error) Was $-9.15(1.74)$ For Dupilumab Vs $-3.50(1.88)$ For Placebo In Part A ($P=0.0166$), And $-12.32(1.40)$ Vs $-6.44(1.43)$ In Part B ($P=0.0018$). At Week 24, Results Were $-21.92(2.53)$ Vs $-9.60(2.79)$ In Part A ($P=0.0004$) And $-23.78(1.86)$ Vs $-13.86(1.91)$ In Part B ($P < 0.0001$). In Patients Who Entered Part C, Mean (Sd) Change In Dsq Score From Part A Baseline To Week 52 Was $-23.44(16.15)$ For Dupilumab/Dupilumab And $-21.71(17.14)$ For Placebo/Dupilumab Patients.

Conclusions

Dupilumab 300mg Qw Significantly Improved Dsq Score Vs Placebo. Effects Were Seen As Early As Week 4 And Maintained Through 24 Weeks In Parts A And B And Through 52 Weeks In Part C. Part C Placebo/Dupilumab Patients Saw Improvement Similar To That Of Dupilumab Patients In Part A.

Op51

Safety And Efficacy Of Fixed-Dose Combination Of Pantoprazole And Sustained Release Levosulpiride For Short-Term Therapy Of Gastroesophageal Reflux Disease In Patients Not Responding To Ppi Monotherapy

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Background And Purpose

Approximately, 30% Of Gastroesophageal Reflux Disease (Gerd) Patients On Standard Doses Of Proton Pump Inhibitors (Ppis) Continue To Manifest Dyspeptic Symptoms. Levosulpiride, A Prokinetic, Regulates Gastric Emptying Time And Relieves Dyspepsia. Pantoprazole, The Long-Lasting Ppi, Inhibits Acid Secretion, Thus Preventing Damage To Gastric And Esophageal Mucosa. The Fixed-Dose Combination (Fdc) Of Levosulpiride Sustained Release (Sr) 75mg With Pantoprazole 40mg Forms A Comprehensive Treatment Option For Gerd.

Methods

This Phase Iv Study Enrolled 509 Indian Patients Of Gerd Not Responding To Ppi Monotherapy. Eligible Patients Were Prescribed Study Medication, To Be Taken Once Daily For 4 Weeks. Primary Endpoint Was Assessment Of Proportion Of Patients With Adverse Events (Aes) Or Serious Aes (Saes). Secondary Endpoints Were Change In Frequency Scale For The Symptoms Of Gerd Scale (Fssg) From Baseline, Change In Severity Of Symptoms Of Gerd By Likert Scale From Baseline, Cgi-I And Cgi-S Scale Score, And Evaluation Of Neurological Side Effects By Modified Simpson Angus Scale.

Results

Overall, 69 Patients Reported 79 Aes Of Mild To Moderate Intensity, Of Which 73 Aes Were Resolved And Outcome Of Remaining Was Unknown. No Sae Was Reported. Hyperprolactinemia Without Any Clinical Manifestations Was Observed In 9.8% Patients. No Neurological Side-Effects Were Reported. Significant Decrease ($P < 0.0001$) In Fssg Score Was Observed At Day-14 (-39.4%) And Day-28 (-69.1%) Compared To Baseline. Statistically Significant ($P < 0.0001$) Reduction In Likert Scale Score Indicating Severity Of Gerd Symptoms Was Observed At Day-14 (-22.8%) And Day-28 (-48.0%). For Approximately 90% Patients, Improvement Of Disease Condition Was Rated As Either 'Very Much Improved' Or 'Much Improved' On Cgi-I Scale. No Patient Was 'Markedly Ill', 'Severely Ill' Or 'Most Extremely Ill' As Assessed By Clinician On Cgi-S Scale At Week-4.

Conclusion

Fdc Of Pantoprazole 40mg- Levosulpiride Sr 75mg Was Effective And Well-Tolerated In Short Term Therapy Of Gerd.

Op52

Long Term Comprehensive Analysis Of Gastroesophageal Reflux After Poem

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Background And Purpose

Peroral Endoscopic Myotomy (Poem) Is Nowadays Considered A Standard Method For Treatment Of Esophageal Achalasia. However, Its Benefits Are Tempered By The Risk Of Post-Poem Reflux Complications. Our Aim Was To Evaluate The Long-Term Impact Of Post-Poem Reflux On Patients Undergoing Poem At Our Center.

Methodology

We Retrospectively Analyzed The Prospectively Collected Data Of All Patients Who Underwent Poem Between December 2012 And April 2022. Patients Were Scheduled For Follow Up Visits At 3 And 12 Months After The Procedure And Annually Thereafter. Upper Gi Endoscopy, High-Resolution Manometry And 24-Hour Ph Monitoring Were Performed 3 Months After Poem; Endoscopy Was Repeated At 2-3 Years And At 6 Years Follow-Up.

Results

Poem Was Performed In 449 Patients. Follow-Up Visits At 48, 60, 72 Months Were Completed In 165, 135 And 78 Patients. Abnormal Acid Exposure Was Observed In 158/345 (45.8%) Patients At 3 Months. Reflux Esophagitis Was Diagnosed In 170/407 (41,8%) During Endoscopy Performed At 3 Months, In 80/222 (36%) At 24-36 Months And In 14/64 (21,9%) Patients 6 Years After Procedure. There Was A Significant Decrease Of Esophagitis Occurrence From 3 Months To 6 Years ($P=0.002$). Ppis Were Taken By 54.7%, 47.7% And 57.3% Of Patients 48, 60 And 72 Months After Poem. Regarding Severe Post-Reflux Complications, Barrett's Esophagus And Esophageal Cancer Weren't Detected In Any Of Our Patients. One Patient Developed Esophageal Peptic Stricture 2 Years After Poem Which Was Treated With 4 Sessions Of Balloon Dilation. Comparison Of Patients With Anterior And Posterior Myotomy Did Not Show Significant Differences.

Conclusion

The Rate Of Post-Poem Reflux Esophagitis Decreases Over Time And Almost No Patients Experience Gerd Symptoms On Daily Basis. However, Approximately 50% Of Patients Require Long-Term Antisecretory Treatment. Severe Post-Reflux Complications Are Rare, But Can Occur. Therefore, Patients After Poem Should Be Under Long-Term Surveillance.

Op53

Automatic Detection And Classification Of Pleomorphic Small Bowel Lesions With Different Bleeding Potential Using A Convolutional Neural Network: A Multicentric Study

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Background And Purpose

Capsule Endoscopy (Ce) Enable The Detection Of Enteric Pleomorphic Lesions With Different Bleeding Potentials. However, Reading Ce Exams Is A Time-Consuming And Monotonous Task, Which Is Prone To Errors. Convolutional Neural Networks (Cnns) Are Highly Efficient Artificial Intelligence Tools For Image Analysis. Our Group Developed A Cnn-Based Model For Detecting And Differentiating Pleomorphic Small Bowel Lesions With Distinct Hemorrhagic Potential Using Ce Images.

Methodology

Our Group Developed, Trained, And Validated A Denary Cnn Based On Ce Images. Each Frame Was Labeled According To The Type Of Lesion (Lymphangiectasia, Xanthomas, Ulcers, Erosions, Vascular Lesions, Protruding Lesions, And Blood) By Three Experts In Ce. Saurin's Classification Was Used To Estimate The Hemorrhagic Potential Of Lesions: P0 – Lesions Without Bleeding Potential; P1 – Lesions With Uncertain Bleeding Potential; P2 – Lesions With High Bleeding Potential; P3 – Luminal Blood. A Total Of 55380 Frames Of The Enteric Mucosa Were Obtained From 2565 Ce Exams From Two Different Centers (1483 From São João University Hospital And 1082 From Manoph Gastroenterology Clinic). Of The Total Image Pool, 90% Of The Frames Were Used To Create The Training Dataset, And 10% Used To Test The Network. The Patients Included In The Training Dataset Were Excluded From The Testing Dataset.

Results

The Model Had An Overall Accuracy Of 98.3%, A Sensitivity Of 89.6 %, And A Specificity Of 98.9%.

Conclusions

The Authors Developed A Cnn For The Automatic Identification And Classification Of Pleomorphic Lesions In Ce Videos And Tested It In Ai Naïve Patients. This Represents An Evolution In The Technology Readiness Level Into A Real-Life Clinical Setting That May Significantly Improve The Diagnostic Yield Of Ce Exams.

Op54

Comprehensive Evaluation Of Dysphagia In Down Syndrome

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Background

The Primary Aim Of This Study Was To Describe And Correlate Pharyngeal And Esophageal Manometry Findings With Contrast Studies And Endoscopy In Patients With Ds And Dysphagia.

Methodology

Data Collected From Emr Included Demographics, Co-Morbidities, Symptoms, Mode Of Feeding, Vfss, Esophagram, Endoscopy With Biopsy Findings And Pharyngeal And Esophageal Manometry Metrics.

Results And Discussion

Twenty-Four Patients With Down Syndrome Underwent Hrm For Evaluation Of Dysphagia. The Median Age Was 14.2 Years (Iqr 7.6, 20.5), With A Male Predominance (75%).

Most Patients (14, 58.3%) Were Fed Orally, 7 (29.2%) Had Combined Oral And G/J-Tube Feeding, And 3 (12.5%) Patients Were On Exclusive Enteral Feeds.

Egd Was Performed In 23 (95.8%) Patients And Esophagitis Was The Major Finding On Biopsy In 11 (47.8%) Patients; Of These 11 Patients With Esophagitis, 9 (81.8%) Were Classified Endoscopically As Normal Or La Grade A, And 2 (18.2%) Patients Were Classified As La Grade B.

Vfss Was Performed In 16 (66.7%) Patients And All, Except One, Were Reported As Abnormal (15, 93.8%). Of These 16 Patients, 10 Had Combined Pharyngeal And Esophageal Manometry Performed And 6 Had Only Esophageal Manometry. Three Of 10 Patients (30%) Showed Abnormal Pharyngeal Metrics And 14 Of 16 (87.5%) Had Abnormal Esophageal Metrics.

Esophagram Suggesting Esophageal Dysmotility Was Reported In 14 Out Of 17 (82.4%) Patients. All 17 Patients (88.3%) Had Hrem And 15 Were Diagnosed With A Motility Disorder. Three Patients (17.7%) With A Normal Esophagram Were Diagnosed With Esophageal Aperistalsis.

Overall, Hrem Was Performed In All 24 Patients And 19 (79.2%) Were Diagnosed With A Motility Disorder. The Findings Included.

Conclusion

In Our Cohort, 83.3% Of Ds Patients With Dysphagia Had Pharyngeal And Or Esophageal Motility Disorder. High Resolution Manometry Provides Complementary Objective Data That May Be Critical In Tailoring Therapeutic Strategies In The Management Of These Patients.

Op55

Do Patients With Constipation Have A Methane-Producing Colonic Flora?

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Background And Purpose

The Lactulose Breath Test (L-Bt) Is A Non-Invasive Test Proposed For The Study Of Sugar Malabsorption, Orocecal Transit Time (Ocutt) And Intestinal Bacterial Overgrowth (Sibo). The 2021 European Consensus Suggests The Measurement Of Methane (Ch₄) To Improve Sensitivity In Patients Who Do Not Excrete Hydrogen (H₂). The Methanogenic Flora Has Been Associated With Slow Transit, Its Causal Or Incidental Relationship With Constipation Is Unclear. This Is The First Local Experience Report. Aims: To Correlate Patients With Constipation, With The Presence Of Methanogenic Flora And Compare With A Non-Constipated Non-Diarrheic Group. (Ncnd). Methodology: Retrospective, Observational Study Of L-Bt Between 2011–2020 With A Standardized Technique. Methanogenic Flora Was Considered More Than 3 Measurements > 12 Ppm In 180 Min. We Evaluated The Total Ch₄ Production; High Producers Of Ch₄ Those That Have 2 Measures Over 60 Ppm. We Considered Bristol 1-2 For Constipation And Bristol 6-7 For Diarrhea. Statistical Analysis With Mann-Whitney And Kruskal Wallis Test. Results: 5,053 L-Bt Were Included, Mean Age 49 Years (18-86), 81% Women; 509 (10%) Were Exclusive Producers Of H₂, 106 (2%) Exclusive Producers Of Ch₄ And 141 (2.7%) Non-Producers Of H₂ Nor Ch₄. The Main Results Are Observed In Table 1. Conclusions: Our Local Population Had Colonic Flora Producing Both H₂ And Ch₄. No Difference Was Observed In Ocutt. Patients With Constipation Had A Higher Total Production Of Ch₄ And A Higher Proportion Of Flora With Exclusive Production Of Ch₄, Compared To Patients With Bristol 6-7.

Op56

Sieving Patients With Non-Celiac Gluten Sensitivity From Patients With Irritable Bowel Syndrome

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Background And Purpose

Non-Celiac Gluten Sensitivity(Ncgs) Affects Approximately 5% Of General Population. There Is Overlapping Of Symptoms Between Irritable Bowel Syndrome(Ibs) And Ncgs. There Is No Biomarker For Ncgs. Diagnosis Criteria For Ncgs Is Evolving, And Presently Based On Appropriate Response To Gluten-Free Diet(Gfd).

Methods

Adult Patients With Ibs(N=492) (Rome Iv Criteria) Were Recruited And Underwent Screening For Celiac And Gluten Sensitivity Using Iga Anti-Tissue Transglutaminase Antibody(Iga-Anti-Ttg Ab), And Iga And Igg Anti-Gliadin Ab(Aga), Respectively. Patients With Positive Aga(Iga And/Or Igg) Were Invited To Follow Gfd And Those Willing Were Put On Gfd For 6-Weeks. Symptoms Were Scored Both At Baseline And At 6-Weeks. Responsive Patients Were Given Gluten Re-Challenge. Diagnosis Of Ncgs Was Confirmed If They Had Recurrence Of Symptoms On Re-Challenge(Salerno Criteria). Human Leukocyte Antigen(HLA)-Dq2/Dq8 Loci Were Amplified, Using Long-Range Polymerase Chain Reaction(Pcr) From Dna Of Aga Positive Patients. Amplicons Were Sequenced On Illumina Platform, Alleles And Haplotypes Were Assigned By HLA-International Immunogenetics(Imgt) Database. Post Gfd Variation In Aga Levels Were Also Measured.

Results

Of 492 Patients With Ibs, Aga Was Positive In 61(12.4%)[Iga-Aga, Igg-Aga And Both Positive In 33(6.7%), 17(3.5%) And 11(2.2%)] And Hence, Suspected To Have Ncgs. Of 61, 32 Agreed To Participate And Followed Gfd For 6-Weeks. Fourteen(43.7%) Didn't Respond To Gfd, Whereas 18(56.2%) Responded With >30% Improvement And 29(90.6%) With >20% Improvement In Top-Three Symptoms. All 18 Responsive Were Given Gluten Re-Challenge For 6-Weeks, Symptoms Recurred In 17 And Hence Were Confirmed To Have Ncgs. HLA Dq2/Dq8 Was Positive In 64.6% Aga Positive Patients. Significant Decrease In Aga Levels Was Observed In Ncgs Patients After Gfd.(P Value = 0.0001).

Conclusions

Approximately 12.4% Of Patients With Ibs Have Biological Evidence Of Gluten Sensitivity. Patients With Ibs Having Aga Positivity, At-Least Half Of Them Have 30% Improvement And 90% Have More Than 20% Improvement In Symptoms.

Op57

Weekend Outreach Endoscopy Services By Gastroenterologists As One Alternative Means Of Expanding Access To Service In Resource Limited Countries-An Ethiopian Experience.

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Background And Purpose

In Ethiopia, A Country Of 114 Million Population, Only Few Well-Trained Gastroenterologists Are Available. Gastrointestinal Endoscopy Services Are Limited To Few Centers In The Major Cities Where Those Professionals Are Stationed. Among The Many Challenges To Expand The Service To Remote Regions Is Lack Of Trained Man Power And Expensive Equipment. To Solve The Problem, Addis Ababa University Started Training Gastroenterologists In Recent Years. But Still People In Most Part Of The Country Do Not Have Access To Gastrointestinal Endoscopy Services. Therefore, One Of The Senior Doctors Working In Addis Ababa University Where Wgo Training Center Is Located, Took The Initiative To Establish Endoscopy Services On Out-Reach Bases As An Alternative Means To Cascade The Wgo Efforts Of Expanding Access To Services.

Methodology

In Collaboration With Jimma Awetu Primary Hospital, Located 350km South West Of Addis Ababa, A New Gi Endoscopy Center Was Established Three Years Back. Four Nurses Were Trained Onsite To Handle The Equipment And Assist During The Procedure. They Also Recruit And Prepare Patient During The Working Days Of The Week.

Results And Discussion

The Service Continued Every Two Weeks. A Total Of 1985 Patients Were Served, 1573 Upper Gi Endoscopy(Egd) And 412 Colonoscopy Evaluations Performed For 800 Female And 1185 Male Patients With Age Raging From 7 To 90 Years. Duodenal Ulcer And Its Complication, Gerd And Malignancies (16.5%) Were The Commonest Egd Diagnosis. Colitis, Malignancies(15.5%) And Polyps(12.6%) Were Among The Commonest Colonoscopic Diagnosis. Benign Obstructive Lesions Constituted 6% Of Egds.

Conclusions

Weekend Out-Reach Endoscopy Services By Gastroenterologists Can Have A Significant Contribution In Improving Access To Endoscopy Services In Resource Limited Countries While Planning To Train And Place Full Time Staff In Peripheral Centers. Major Diseases Like Gastrointestinal Malignancies, Ulcer And Complications Are Common In Southwest Ethiopia.

Op58

Artificial Intelligence And Device-Assisted Enteroscopy: Automatic Detection Of Enteric Protruding Lesions Using A Convolutional Neural Network

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Background And Purpose

Device-Assisted Enteroscopy (Dae) Plays A Major Role In The Investigation And Endoscopic Treatment Of Small Bowel Diseases. Recently, The Implementation Of Artificial Intelligence (Ai) Algorithms In Gastroenterology Has Been The Focus Of Great Interest. Our Aim Was To Develop An Ai Model For The Automatic Detection Of Protruding Lesions (Pp) In Dae Images.

Methodology

A Deep Learning Algorithm Was Designed Based On A Convolutional Neural Network (Cnn). Each Frame Was Evaluated For The Presence Of Protruding Gastrointestinal Lesions. The Area Under The Curve (Auc), Sensitivity, Specificity, And Positive And Negative Predictive Values (Ppv/Npv) Were Used To Assess The Performance Of The Cnn.

Results And Discussions

A Total Of 17638 Images From 250 Patients Were Included. Our Model Had A Sensitivity And Specificity Of 95.0% And 99.7%, Respectively. The Ppv Was 99.3%, And The Npv Was 97.7%. The Auc Was 1.00.

The Ai Model Developed, Introduces A Significant Technical Innovation By Enabling Panendoscopic Ai Analysis Of The All Gi Tract

Conclusions

Our Group Developed A Pioneer Ai Algorithm For The Automatic Detection Of Pleomorphic Protruding Lesions In The Gi Tract During Dae.

The Development Of These Tools May Enhance The Diagnostic Yield Of Device-Assisted Enteroscopy.

Op59

Suggesting A Mechanism For "Irritable Bowel Syndrome" And Fibromyalgia-Like Syndromes As A Global Chronic Compartment-Like Syndrome: The Body And The Mind Are One Being

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Background And Purpose

Chronic Pain Is A Major Cause Of Suffering And Is Extremely Prevalent. Functional Somatic Syndromes Such As Irritable Bowel Syndrome (Ibs) And Fibromyalgia Are A Common, Overlooked, And Misunderstood Condition With Significant Burden. The Mechanism Of Ibs And Related Psychosomatic Syndromes Is Yet To Be Fully Understood. The Marked Epidemiological And Symptomatologic Overlap Between Such Syndromes Suggests A Common Mechanism. Many Theories Exist For Ibs And Fibromyalgia, But No Single Theory Seems To Explain A Wide Range Of Empirical Evidence And The Pathophysiology And Etiology Are Still Not Clear. Treatments Are Insufficient, Meanwhile Patients Suffer. This Work Suggests An Organic Mechanical Mechanism To Help Explain "Functional Psycho/Somatic Syndromes" Like Ibs And Fibromyalgia, Based On Cross-Disciplinary Empirical Studies.

Methods

Systematically Searched Multiple Phrases In Medline, Embase, Cochrane, Pedro, And Medrxiv, Majority With No Time Limit. Inclusion/Exclusion Based On Title And Abstract, Then Full-Text Inspection. Additional Literature Added On Relevant Side Topics.

Results

The Theory Of "Facial-Armoring" Suggests Ibs And Fibromyalgia-Like Entities May Be A Multifactorial Disease Involving A Connective-Tissue Pathology Driven, In Part, By Myofibroblast-Generated-Biotensegrity-Tension. This May Help Explain Several Phenomena Including: Functional Peristaltic Impairment, Gastroenterological Symptoms, Decreased Pressure-Pain Threshold, Tender Spots, Chronic Fatigue, Cardiovascular And Metabolic Abnormalities, Autonomic Abnormalities, , Absence Of Clear Inflammation, Silent Imaging Investigations, And Other Phenomena (E.G., Complete Resolution Soon After Surgery) And The Marked Overlap Between Ibs And Fibromyalgia.

Conclusions

"Fibromyalgia-Like Entities" Such As Ibs, When Severe, Resemble A Chronic-Compartment-Like-Syndrome-Of-The-Whole-Body And Can Lead To Pain And Visceral Organ Malfunction Due To A Network Of Contractile Fascial Myofibroblasts, At Least In Part. Treatment Should Focus On Lifestyle And Non-Pharmacological Modalities. The Body And Mind Are One Being.

Reference:

Plaut S. Scoping Review And Interpretation Of Myofascial Pain/Fibromyalgia Syndrome: An Attempt To Assemble A Medical Puzzle. Plos One. 2022;17(2):E0263087.

Op60

Application Of Artificial Intelligence For Identification Of Delayed Balloon Expulsion Test Using High-Resolution Anorectal Manometry Data And Integrated Pressurized Volume

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Background

Anorectal Manometry With The Push Maneuver Has A Limitation In Predicting Balloon Expulsion (Be) Test Results. We Developed A Frontier Model With Machine Learning To Identify Delayed Be Test Using Hram And Ipv.

Methodology

Three Hundred Constipated Patients (130 Male And 170 Female) Were Enrolled And Underwent Both Hram And Be Test From September 2020 To May Of 2021. Delayed Be Was Defined As A Requirement Of More Than 1 Min. Hram Profiles During Push Maneuver Were Converted Into Ascii Files And Analyzed Using A Matlab Program To Calculate Ipv By Multiplying The Amplitude, Distance, And Time. The Pressure Data And Ipv From Catheter Were Divided Into 40 Time Series Datasets During Push Maneuver. Convolutional Neural Networks (Cnns) And Long Short-Term Memory (Lstm) Network Were Applied For Prediction Of Be Test Results By Using Each Manometric Pressure Data And Ipv Parameters. The Cnns Extract Features Of Each Dataset And Lstm Learns Chronological Changes Of The Feature During Push Maneuver.

Results: Of 130 Male, 61 (46.9%) Showed Early Be And The Remaining 69 (53.1%) Showed Delayed Be. Among 170 Female, 121 (71.2%) Showed Early Be And The Remaining 49 (28.8%) Showed Delayed Be. After The Receiver Operating Characteristic (Roc) Curve Analysis, Ipv Ratios Between The Upper 1 Cm And The Lower 4 Cm (I_{pv14} Ratio) Were A Best Parameter At Predicting Be Test Results. Roc Yielded An Area Under The Curve (Auc) Of 0.88 For Male And 0.98 For Female In Identification Of Delayed Be Test Results.

Conclusions

We Applied Artificial Intelligence (Ai) To Classify Delayed Be Test Results Using Both Manometry Data And Ipv. Furthermore, The Developed Model Also Utilizes Temporal Changes Of Hram Data During Push Maneuver. This Study Demonstrates The Role That Ai Will Serve In The Interpretation And Classification Of Hram Studies.

Op61

Single-Strain Probiotics For The Management Of Acute Diarrhea In Children: A Randomized Comparative Study

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Background And Purpose

To Assess The Efficacy Of Probiotics In Managing Acute Gastroenteritis In Children, Including Reducing The Need For Inpatient Care And Antibiotics, Repeat Visits To Emergency Or Private Clinics, And Incidence Of Adverse Events.

Acute Gastroenteritis Is Characterized By Diarrhea, Vomiting, And Occasionally, Abdominal Pain And Fever. Treatments Include Oral Rehydration Solutions To Prevent Dehydration And Nutritional Damage And Zinc Supplementation To Reduce The Severity Of Diarrhea And Reoccurrence. Probiotics Are Effective In Reducing The Intensity And Duration Of Acute Gastroenteritis; However, Their Efficacy In The Indian Population Needs Further Investigation.

Methodology

In This Single-Center Open-Label Randomized Study, The Efficacy Of 3 Single-Strain Probiotics, *Bacillus Clausii*, *Saccharomyces Boulardii*, And *Lactobacillus Rhamnosus Gg*, As Adjuvant Therapy Along With Oral Rehydration Solution And Zinc Supplements In The Management Of Acute Gastroenteritis, Were Compared In 150 Children Aged 6 Months To 16 Years.

Results And Discussion

B. Clausii Was The Most Effective Single-Strain Probiotic In Our Study For The Management Of Acute Diarrhea In Children Across Various Parameters, Including Time To First Formed Stool, Reduction In The Duration Of Diarrhea, Reduced Hospital Admissions, And Earlier Recovery.

Conclusions

All 3 Probiotics Demonstrated No Adverse Effects. Readmission And Revisit Rates After Treatment With These Probiotics Were Extremely Low. *B. Clausii* Is Strongly Recommended As Adjuvant Therapy In Children With Acute Gastroenteritis.

Op62

Comparison Of Rose Vs Mose For Eus Guided Lymph Node Sampling Using Newer Generation Biopsy Needle

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Background

Whether Rapid On-Site Examination (Rose) Increases Yield In Patients Who Undergo Endoscopic Ultrasound Guided Biopsy Has Been A Matter Of Debate. We Aimed To Compare Yield Of Eus Guided Biopsy With Smear Cytology With Adequacy Confirmed By Rose, Acquired Using The Same Needle While Sampling Lymph Nodes.

Methods

Consecutive Patients Who Had Undergone Eus-Guided Tissue Acquisition Of Lymph Nodes From January 2021 To May 2022 Were Included. Sampling Was Done Using 22g Acquiretm Needle (Boston Scientific Co.) In All Cases Using Slow Stylet Pull-Through Method. The First Pass Was Given For Rose To Assess Adequacy And Sent For Cytology Subsequently. The Endoscopist Then Collected Sample For Histopathology, Adequacy Of Which Was Confirmed By Macroscopic On-Site Evaluation (Mose- Presence Of At Least 4 Mm Length Of Core). Number Of Passes (Overall And For Rose Adequacy) Were Noted. Final Cytology And Histopathology Reports Were Compared For Diagnostic Accuracy.

Results: 42 Patients Were Included In The Study (Mean Age 50.2 Years; 61.3% Male). Median Largest Dimension Of Lesions Was 22 Mm (Iqr 16-32 Mm). In 13 (30.9%) Patients, Mediastinal Lymph Nodes Were Sampled And In 29 (69%), Abdominal Were Sampled. Diagnosis Of Malignancy Was Made In 9 (21.4%) Patients And Granulomatous Inflammation (Tuberculosis Vs Sarcoidosis) In 10 (23.8%) Patients. Median Number Of Passes Made Were 2 (Range 2-5). Only One Pass Was Taken For Rose In All Patients. Sensitivity And Specificity Of Mose With Histopathology For Lymph Node Sampling Is 97.6% And 100% Respectively. Sensitivity And Specificity Of Rose With Cytology Is 95.2% And 100% Respectively. On Mcnemar Test For Paired Data, There Was No Significant Difference Between Mose With Hpr And Rose With Cytology In Achieving An Optimal Diagnosis (P=1.00).

Conclusion

Rose Does Not Add Additional Value To Sampling Of Lymph Nodes Using Newer Generation Eus Biopsy Needles.

Real-Life Experience With The Use Of Tofacitinib In Colombian Patients With Moderate To Severe Ulcerative Colitis (Tofarecol).

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Background And Purpose

Ulcerative-Colitis Is The Most Frequent Form Of Ibd In Colombia. New Therapeutic Options Such As Tofacitinib Are Recently Available. There Are No Real-Life Studies In Latin-America. The Objective Of This Study Is To Describe The Real-Life Experience In Colombian Patients With Uc Moderate-Severe, Treated With Tofacitinib.

Methods

Multicenter Descriptive Observational Study, Patients With Uc Moderate-Severe Treated With Tofacitinib, Who Received Induction-Phase Treatment (10mg Every 12hours) And Then Maintenance Therapy (5mg Every 12hours), Between June2019 And June2022. Continuous Variables Were Presented As Means With Standard Deviations (Sd). Categorical Variables Were Presented As Percentages.

Results: Thirty-Five Patients Were Included, 51.4%Were Women, The Average Age Was 37.46(Sd12.26) Years (Range16-72). All Patients Had Moderate To Severe Uc; 74.3%Had Pancolitis, And 22.9%Left-Colitis. The Mean Age Of Diagnosis Was 32.14(Sd10.78) Years (Range12.77-57.21). And The Mean Time Between Disease-Onset And Tofacitinib Initiation Was 5.19(Sd4.96) Years (Range0.02-23.78).

28/35(80%) Patients Had Previously Failed Tumor-Necrosis-Factor-Inhibitors (17adalimumab, 19infliximab, And 1golimumab) And Twelve Patients Alpha4-Beta7-Integrin-Inhibitor (Vedolizumab). Five Patients Were Naïve To Any Biologic Drug. Eight Patients Had Extraintestinal-Manifestations.

During Induction-Phase, 60%Achieved Clinical And Biochemical Remission. According To The Acg-Activity-Score, 62.9%Remained Achieved Mild Activity Or Remission. Endoscopically, 51.4%Of Patients Presented Mayo-Score1 And 11.4%Mayo-Score0.

During The Maintenance-Phases, 13patients Achieved 6-Month Follow-Up, 84.6%Reported Clinical And Biochemical Remission. Information Was Obtained From 6patients At 12-Months, 83.33%Showed Clinical And Biochemical Remission.

Three Patients Reported Adverse Events (Severe Headache, Alopecia-Areata And Herpes-Zoster). Non-Severe Infections Were Reported In Only Three Cases.

42.9%Were Steroid-Dependent, And 22.9%Required Steroids As Rescue-Therapy.

A Total Of 37.14%Of Cases Required Increase To 10mg Every 12hours During Maintenance And 17.1%Of Cases Required Withdrawal Of Tofacitinib, Due To Lack Of Efficacy.

Conclusions

This Is The Only Latin-American Study On Safety And Efficacy Of Tofacitinib, Being An Effective And Safe Therapeutic Alternative In The Management Of Moderate-Severe Uc In Our Population.

Op64

Comparing Per-Pass Performance Of Two Types Of Needles For Endoscopic Ultrasound-Guided Fine Needle Biopsy Of Pancreatobiliary Masses In A Randomized Trial

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Eus-Guided Fine-Needle Biopsy (Eus-Fnb) Has Largely Replaced Fine-Needle Aspiration For Tissue Diagnosis Of Pancreatobiliary Mass Lesions. However, The Optimal Number Of Passes Required For The Diagnosis Of Malignancy Is Not Clear. We Aimed To Compare Per-Pass Performance Of Two Types Of Fnb Needles For The Detection Of Malignancy.

Methods

Patients With Solid Pancreatobiliary Mass Lesions (N=114) Underwent Randomization Between Biopsy With A Franseen Needle (Boston Scientific, Usa), And A Multi-Blade Three-Prong Tip Needle (Microtech, China). Four Passes Of Fnb Were Taken From Each Mass. Final Diagnosis Of Malignancy Was Made Based On Fnb Pathology, Surgery, Or A Follow-Up Of At Least 6 Months After Fnb. Cumulative Sensitivity Of Detection Of Malignancy By Eus-Fnb Was Calculated After Each Pass And Compared In Two Groups.

Results

Ninety Eight Patients (86%) Had A Final Diagnosis Of Malignancy, And 16 Patients (14%) Had Benign Disease. Eus-Fnb With The Franseen Needle Detected Malignancy In 44 Of 47 Patients (Sensitivity Of 94%; 95% Confidence Interval [Ci]:83%-98%), And With The Three-Prong Tip Needle In 50 Of 51 Patients (Sensitivity Of 98%; 95% Ci:90%-100%) (P: 0.36). Two Passes Of Fnb Detected Malignancy With 91% Sensitivity (95% Confidence Interval [Ci]:80%-97%) With The Franseen Needle, And 90% (95% Ci:79%-96%) With The Three-Prong Tip Needle. The Cumulative Sensitivities At Pass 3 Were 94% (95% Ci:83%-98%), And 96% (95% Ci:87%-99%), Respectively. Samples Collected With The Franseen Needle Had Significantly Higher Cellularity Than Samples Collected With The Three-Prong Tip Needle (P<0.01). However, There Was No Difference Between The Two Types Of Needles In Term Of Specimen Bloodiness.

Conclusion

There Was No Significant Difference In The Performance Of The Two Needle Types. However, The Franseen Needle Yielded Higher Cellularity Of The Specimen. Two Passes Of Fnb Are Required To Detect Malignancy With At Least 90% Sensitivity With Either Type Of Needle. Clinicaltrials.Gov No:Nct04975620

Op65

Interim Results In Evaluating The Efficacy Of A New Method Of Preventing Postmanipulative Pancreatitis

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Introduction And Objective

The Incidence Of Postmanipulative Pancreatitis (Pep) Remains Stable. Preliminary Results Of The New Method Of Pep Prevention In Case-Control Series Were Encouraging. Our Goal Was An Objective Independent Evaluation Of The Efficacy Of The New Pep Prophylaxis Method. The Total Volume Of The Study Is Planned To Be 300 People.

Methods

A Prospective Randomized Trial. In 2021, 131 Patients Who Underwent Papillotomy Were Included In The Study. There Were 40 Men And 91 Women. Patients Were Randomized Into Three Groups: Group 1, A New Prophylaxis Method, Double Postbulbar Blockade (2-Pbb). Group 2, Pseudo-Postbulbar Blockade (Pseudo-Pbb). Group 3, Without Pbb. 2-Pbb Was Performed Before The Papilla Intervention And At The End Of The Manipulation By 10 ML Of Novocaine/Lidocaine Solution Administered Submucosally. Pseudo-Pbb Consisted Of 10 ML Of Saline Solution Administered Submucosally. Statistical Analysis Was Performed Using Chi-Square Criterion, Fisher's Exact Method, Reliable Differences Were Considered At $P < 0.05$.

Results

The Overall Pattern And The Overall Incidence Of Known Complications (Pancreatitis, Pancreonecrosis, Bleeding, Perforation) Did Not Differ Significantly Between The Groups (Friedman Anova And Kendall Coeff. Of Concordance (Spreadsheet1) Anova Chi Sqr. ($N = 5$, $Df = 2$) = 2.375000 $P = 0.30498$ Coeff. Of Concordance = 0.23750 Aver. Rank $R = 0.04687$). The Frequency Of Pep And Pancreonecrosis Also Had No Significant Differences ($\chi^2 = 0.00-1.34$, $P = 0.9835-0.2510$). Group 3 Significantly More Often Used General Anesthesia ($\chi^2 = 15.87$, $P = 0.0001$). Group 1 Patients Had Significantly Shorter Hospital Stay Compared To Groups 2 And 3 ($P = 0.0000$).

Conclusion

An Interim Evaluation Of The New Pep Prophylaxis Method Revealed Its Impact On The Reduction Of Hospitalization Period, But Did Not Confirm Reliable Differences From The Standard Pep Prophylaxis Methods In The Spectrum And Overall Incidence Of Complications.

Op66

One Stage Ercp Plus Laparoscopic Cholecystectomy (Intra-Operative Ercp) Procedure Versus Two Stage Approach (Pre-Operative Ercp Followed By Laparoscopic Cholecystectomy) For The Management Of Symptomatic Cholelithiasis With Suspected Cbd Stones.

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Background

Choledocholithiasis Is A Prevalent Clinical Disease, With Symptomatic Cholelithiasis Occurring In 10%–20% Of People, 7–14% Of Cholecystectomy Patients, And 18–33% Of Patients With Acute Biliary Pancreatitis. Endoscopic Retrograde Cholangiopancreatography (Ercp) And Laparoscopic Cholecystectomy (Lc) Are The Best Options For Concurrent Gallstones And Common Bile Duct Stones.

Aim

This Study Aimed To Evaluate The Safety And Effectiveness Of Managing Choledocholithiasis In One Stage (Ercp + Laparoscopic Cholecystectomy) Compared To Two-Stage Procedures (Ercp Followed By Laparoscopic Cholecystectomy In Two Different Anesthesia).

Method

The Sample Size Of 179 Patients With Symptomatic Gallstones Underwent Ercp And Laparoscopic Cholecystectomy In A Tertiary Care Hospital In Karachi From December 2012 To December 2014, Out Of Which 41 Patients Went Through Single-Stage Management Under General Anesthesia, While 138 Patients Were Treated With Sequential Ercp And Laparoscopic Cholecystectomy.

Results

179 Patients Underwent Ercp And Laparoscopic Cholecystectomy, And The Results Were Compared; The Success Rate Was Found High In A One-Stage Group (95%) As Compared To A Two-Stage, With Fewer Complications When Gone Through One-Stage Management. The Success Rate Was Significantly High In The Stage One Group Than In The Stage Two Group ($P= 0.03$). The Mean Operative Time In The Stage Two Group (3.38 Hours) Was Longer Than The Stage One Group (2.24 Hours), And It Was Found To Be Highly Significant ($P= 0.000$). The Mean Length Of Hospital Stay Was Also Found Significant In Our Study As Stage One Had A Mean Length Of Hospital Stay Of 1.71 Days While Stage Two Had 3.46 Days ($P= 0.000$).

Conclusion

This Study Proved That This Modified Technique, I.E., One-Stage Ercp Combining Laparoscopic Cholecystectomy, Can Effectively Reduce The Number Of Complications, Increasing The Success Rate And Reducing Operative Time And Hospital Stay, Reducing Hospital Expenses.

Op67

The Intrahepatic Presence Of The Specific Bacterial Species Is Associated With The Alleviation Of Hepatic Steatosis In A Human Microbiota-Associated Murine Model

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Background

The Occurrence Of Metabolic Dysfunction-Associated Fatty Liver Disease (Mafld), Highly Associated With Obesity, Is Not Rare In Lean People. To Date, It Has Been Discovered That Bacterial Dna Is Present In The Liver Of Mafld Patients. Whether There Are Differential Intrahepatic Bacterial Profiles In Lean And Obese Mafld, And Their Functional Roles Are Yet Uncertain.

Methods

A Human Microbiota-Associated (Hma) Murine Model Was Established By Transplanting Fecal Microbiota Into C57bl/6j Mice Individually Using Fecal Slurry From Lean And Obese Mafld Donors (N=8 In Each Group). 16s Rrna Sequencing On V3-V4 Regions Was Used To Target The Bacterial Dna Extracted From The Liver Of Hma Mice. Microbiome Analysis On Bacterial Composition At Different Taxonomic Levels And The Microbial Functional Prediction Was Performed.

Results

Lean Recipient Mice Had Significantly Lower Intrahepatic Triglyceride Content (46.89±3.86 Mg/G Vs. 68.51±4.18 Mg/G, P=0.002) And Microbial Diversity (Chao 1 Richness: 207.00±15.21 Vs. 282.20±16.03, P=0.002) Than Obese Recipient Mice. Biomarker Discovery Analysis Showed That Streptococcus Oralis (Log₁₀ Lda Score 4.80, P=0.002) And Bacteroides Acidifaciens (Log₁₀ Lda Score 4.75, P=0.001) Were Significantly Enriched In The Liver Of Lean Recipient Mice When Compared To Obese Recipient Mice At The Species Level, Which All Correlated Negatively With Intrahepatic Triglyceride Levels (R=-0.755, P=0.001 And R=-0.801, P<0.001). The Predicted Flavin Biosynthesis I Pathway Was Significantly Enriched In Lean Recipient Mice When Compared To Obese Recipient Mice With The Highest Log₁₀ Lda Score Of 4.83 (P=0.046); And Was Correlated Positively With Bacteroides Acidifaciens (R=0.557, P=0.025).

Conclusion

The Hma Mafld Murine Model Demonstrated That Intrahepatic Bacterial Abundance Might Be Associated With Intrahepatic Triglycerides. The Presence Of Bacteroides Acidifaciens In The Liver, Previously Known For Beneficial Effects On Obesity, May Play A Beneficial Role In Preventing Hepatic Steatosis In Part Through The Mediation Of Riboflavin Production.

Op68

Predictive Factors And Long-Term Outcomes In Patients With Bleeding Gastric Cancer: A Large Population- Based Study

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Background

Gastric Cancer Is A Major Leading Cause Of Cancer-Related Death. Bleeding Gastric Cancer Is A Fatal Condition Associated With Poor Prognosis. The Aim Of This Study Was To Evaluate Long-Term Outcome And Predictive Factors Of Gastric Cancer Patients With Bleeding.

Methods

This Retrospective Cohort Study Was Conducted At Thammasat University Hospital, Thailand Between 2010-2018. Patients' Demographic Data, Histologic Features, Laboratory Results, Endoscopic Findings And Treatment Outcome Were Collected From Electronic Medical Database. Patients With Gastric Adenocarcinoma Were Enrolled And Followed Up For At Least 5 Years.

Results

A Total Of 161 Patients With Mean Age Of 60.4 Years Were Included. There Were 80 (50.3%) Men And 81 (49.7%) Women. Of All 161 Patients With Gastric Cancer, 53 (32.9%) Experienced Upper Gi Bleeding (Ugib). Patients With Bleeding Gastric Cancer Significantly Had Comorbidities Such As Hypertension And Chronic Kidney Disease Than Non-Gi Bleed Group (39.6% Vs 21.3%, P=0.023 And 13.2% Vs 2.8%, P=0.015; Respectively). There Was No Difference In Baseline Characteristics And Initial Presentations. The Prevalence Of Smoking And Alcohol Drinking In Ugib Groups Were Significantly More Common Than Non-Bleeding Groups (30.2% Vs 10.2%, P=0.003 And 35.8% Vs 15.7%, P=0.008). In Multivariate Analysis, Abdominal Pain Was An Independent Risk Factor For Acquiring Ugib In Gastric Cancer Patients (OR=3.01, 95%CI=1.40-6.46, P=0.005). 1-Year And 5-Year Survival Rates In Gastric Cancer With Ugib Were 47.2% And 5.7%. Successful Endoscopic Treatment Was Achieved In 64.7% Of Patient With Bleeding Gastric Cancer. Combination Of Endoscopic Techniques Provided Higher Rate Of Successful Hemostasis Compare With Single Modality (85.7% Vs 50%).

Conclusions

Ugib Was A Fatal Condition In Gastric Cancer Patients Lead To Poor Outcome And Grave Prognosis Especially Patients With Rebleeding. The Clinical Presentation With Abdominal Pain In Gastric Cancer Patient Might Be A Good Predictor For Acquiring Bleeding Condition. Combination Of Endoscopic Modalities Provided Superior Rate Of Achieving Hemostasis Control.

Keywords: Gastric Cancer, Upper Gastrointestinal Bleeding, Long-Term Outcomes

Op69

Assessment Of Burden Of Partial Response To Standard Doses Of Proton Pump Inhibitors In Patients With Gastroesophageal Reflux Disease: A Real-World Evidence Study

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Background And Purpose

Mainstay Of Gastroesophageal Reflux Disease (Gerd) Treatment Includes Proton Pump Inhibitors (Ppis). However, Several Studies Showed That Up To 40% Patients Have Either Partial Or No Response To Standard Dose Of Ppis. Though There Have Been Clinical Studies To Assess Burden Of Partial Responders To Ppis, Only Few Are Conducted In Real-World Settings.

Methods

This Electronic Medical Record (Emr)-Based Study Was Planned To Understand The Burden And Clinical Profile Of Partial Responders To Standard Dose Of Ppis. Additionally, Prescription Pattern Of Ppis Across Various Medical Specialties, Physician's Approach For Treating Partial Responders, And Effectiveness Of Pantoprazole Dual Delayed Release (Ddr) 80mg Formulation Was Assessed.

Results

Emrs Of 5205 Patients Were Included In The Analysis, 38.02% Patients Were On Rabeprazole And 36.62% Patients Were On Pantoprazole. Mean Age Of Patients Was 53.33 Years And Most Were Males (55%). Heartburn Was The Chief Complaint As Reported By Patients (76.02%). Half Of The Patients Had Cardiovascular Comorbidity, With Dyslipidemia Being Most Common. Type-2 Diabetes And Diabetic Neuropathy Were Among Other Common Comorbidities. Pantoprazole And Rabeprazole Were The Most Preferred Ppis Across Specialties. Overall, Burden Of Partial Responders To Ppis Was 41.7% (2173/5205). Among Partial Responders, Maximum Patients Were Managed With Addition Of Other Drugs (N=1456), Followed By Switch-Over To Other Ppi (N=542) And Change In Dose Or Frequency (N=317). Both Pantoprazole Ddr 80 Mg And Pantoprazole 40 Mg Twice-Daily Showed Significant Reduction In Gerd Symptoms (Heartburn, Regurgitation, Abdominal Pain, Pain On Food Intake, Nausea, Vomiting, Belching, Bloating, And Day And Night Symptoms) From Baseline To Week 4 And Week 8.

Conclusion

As Evident From This Study, Burden Of Partial Responders Is As High As 41.7%. Additionally, Both Pantoprazole Ddr 80mg Once-Daily And Pantoprazole 40mg Twice-Daily Regimens Demonstrated Significant Reduction In Gerd Symptoms From Baseline To Week-8 In Partial Responders.

Op70

Percutaneous Spyglass Through Biliodigestive Derivation For Intra-Hepatic Stricture On A Late Liver Transplant Case

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Background And Purpose

Biliary Complications After Liver Transplant Are Still

Common And Treatment Of Biliary Strictures Is Challenging. We Present A 71-Year-Old Woman Who Is Status Post Orthotopic Liver Transplant. Her Post Transplant Course Was Complicated By Recurrent Cholangitis, Intrahepatic Stones And Biliary Anastomotic Stricture Into The Biliodigestive Derivation.

Methods

A 71-Year-Old Woman Underwent A Liver Transplant In 1995 Due To Autoimmune Cirrhosis. Post-Transplant Course Is Initially Marked By Biliary Stenosis Managed With A Metallic Prosthesis Into The Biliary System Followed By Biliodigestive Derivation. Recurrent Episodes Of Cholangitis Marked The Post-Transplant Course. Magnetic Resonance Cholangiopancreatography Revealed Moderate Bile Duct Dilation In Association With Intrahepatic Calculi. Multiple Endoscopic Balloon Dilation For Removal Of Bile Duct Stones Were Unsuccessful. Percutaneous Anterograde Cholangioscopy Was Performed With A Single Operator Cholangioscope (Spyglass 2) Passed Through A 14-French Sheath. The Biliodigestive Derivation Anastomosis Was Ballooned And Impacted Stones Within The Intrahepatic System Were Fragmented Using A Laser Fiber (200 μ m / 6-10 Hz) And Pushed Into The Biliodigestive. Lastly A Cholangiography Was Performed To Ensure Patent Biliary System Drainage.

Results

Total Procedure Duration Was 120 Minutes. An External 12-French Pigtail Drain Was Placed Into The Biliary System Through The Biliodigestive Derivation. Patient Was Discharged Home On Post-Operative Day 5 With No Major Complications. Drain Was Removed On Post Operative Day 14.

Conclusions

Percutaneous Spyglass Provides A Less Invasive Approach To Establish Biliary Drainage Across Recurrent Episodes Of Cholangitis And Intra-Hepatic Calculi.

Op71

The Role Of Serum Glypican-3 As A Novel Biomarker In The Diagnosis Of Hepatocellular Carcinoma In Lagos, Nigeria.

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Background And Purpose

Glypican-3, A Heparan Sulphate Proteoglycan That Is Highly Expressed In Hepatocellular Carcinoma Tissue, Has Been Evaluated As A Diagnostic Biomarker, With Conflicting Results. The Aim Of Our Study Was To Determine The Serum Levels Of Glypican-3 In Cases With Liver Cancer As Well As In Two Categories Of Controls: Subjects With Chronic Liver Disease And Apparently Healthy Subjects. We Compared The Sensitivity And Specificity Of Glypican-3 With Alpha-Foetoprotein And Determined The Usefulness Of Combining Glypican-3 And Alpha-Foetoprotein In The Diagnosis Of Hepatocellular Carcinoma.

Methods

One Hundred And Eighty-Nine Subjects Were Evaluated, 63 With Hepatocellular Carcinoma, 63 With Benign Chronic Liver Disease And 63 Apparently Healthy Subjects. Serum Glypican-3 And Alpha-Foetoprotein Levels Were Measured Using Commercially Available Enzyme-Linked Immunosorbent Assays (Elisa). Diagnostic Accuracy Was Analysed Using The Receiver Operating Characteristics (Roc) Curve.

Results

The Median (Ng/MI) Serum Levels Of Glypican-3 Were Similar Among The Three Study Groups At 28.7 (15.4-45.4) In Hepatocellular Carcinoma Group, 31.6 (8.6-59.4) In The Chronic Liver Disease Group And 35.3 (20.0-60.2) In The Healthy Control Group (P Value=0.176). The Sensitivity And Specificity Of Glypican-3 Was 73% And 30% Respectively Based On A Receiver Operating Characteristic (Roc) Curve –Derived Optimum Cut-Off Level ≥ 17.8 Ng/MI. The Sensitivity And Specificity Of Alpha-Foetoprotein Were 19.0% And 98.4% At ≥ 400 ng/MI. The Area Under The Receiver Operating Characteristic Curve (Auroc) For Alpha-Foetoprotein Was 0.784 And Was Significantly Larger Than That Of Glypican-3 Which Was 0.444 (P < 0.001). When Glypican-3 And Alpha-Foetoprotein Were Combined, The Sensitivity, Specificity And Auroc Were 17.6%, 96.8%, And 0.708 Respectively.

Conclusion

Glypican-3 Was Not Useful In The Diagnosis Of Hepatocellular Carcinoma. However, Its Accuracy Increased When Combined With Alpha-Foetoprotein, Though This Was Less Than That Of Alpha-Foetoprotein Alone.

Op72

High Efficacy Of Standard Triple Therapy By Adding Probiotic Supplement For H. Pylori Treatment In Area Of High Clarithromycin Resistance: A Randomized, Placebo-Controlled, Double-Blind Study

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Background

H. Pylori Infection Is Major Risk Factor For Gastric Cancer. Standard Triple Therapy Has Limited Efficacy In Thailand (27.1% Of Clarithromycin Resistance). Adding Probiotic Could Increase H. Pylori Eradication Rate And Reduce Adverse Events. This Study Aimed To Evaluate Efficacy Of Standard Triple Therapy With Probiotic Supplement For H. Pylori Eradication In Area Of High Clarithromycin Resistance.

Methods: This Preliminary Report Of Double-Blind Randomized Placebo-Controlled Study Was Performed During July 2020 To January 2022. Patients With H. Pylori Gastritis Were Randomized 1:1 To Receive 14-Day Standard Triple Therapy With Probiotic Or Placebo. Treatment Regimen Consisted Of 30 Mg Lansoprazole Twice Daily, 1g Amoxicillin Twice Daily, And 1g Clarithromycin Mr Once Daily. Probiotic Capsule (Lacidofil®) Composed Of L.Helveticus And L.Rhamnosus Was Given Twice Daily. Successful H. Pylori Eradication Was Defined As Negative 13c-Urea Breath Test At Least 4 Weeks After Completion Of Treatment.

Results

50 Patients Were Randomized Into 14-Day Regimens With Or Without Probiotic. Mean Age Of Patients Was 54.3±10.6 Years (51% Males And 49% Females). Baseline Demographic Data Were Not Different Between Groups. Eradication Rates In Those Received 14-Day Regimen Plus Probiotic Supplement Were 92% And 83.3% With The 14-Day Regimens With Placebo. However, There Was No Statistical Significance In The Eradication Rate Between Two Groups (P=0.417). Antibiotic Susceptibility Tests Performed By E-Test And Genotype® Helicodr Demonstrated Metronidazole And Clarithromycin Resistance Rates Of 38.9% And 33.3%, Respectively. Common Side Effects Which Were Diarrhea, Vomiting, Bloating, And Bitter Taste Were Significant Lower In Probiotic Supplement Than Placebo Group With Or 5.24 (95%Ci 1.22-22.4, P=0.026), Or 17.1 (95%Ci 1.98-148.45, P=0.01), Or 9.82 (95%Ci 1.11-87.9, P=0.04) And Or 12 (95%Ci 1.36-105.41, P=0.025, Respectively.

Conclusions

14-Day Standard Triple Therapy With Probiotic Provided Excellent Eradication Rate Of H. Pylori Infection In Area Of High Clarithromycin Resistance. Adding Probiotic Can Also Reduce Adverse Events.

Op73

Zinc Carnosine-Based Modified Bismuth Quadruple Therapy Versus Standard Triple Therapy For Helicobacter Pylori Eradication: A Prospective Open-Label Randomized Study

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Introduction: Helicobacter Pylori Infection Is A Worldwide Problem With Increasing Burden On The Health Sector Due To Its Increasing Rate Of Resistance. The Conventional Triple Therapy Is Becoming Obsolete With A High Failure Rate Of Eradication, Necessitating The Need For Better Alternatives Or Regimens.

Methods

Ninety-Two Patients With Dyspepsia Symptoms And Positive ¹³C-Urea Breath Test Were Randomly Assigned In To Two Groups. The First Group (Control Group) Was Treated For 14 Days Using Standard Triple Therapy (Tt) Protocol: Esomeprazole (40 Mg Twice Daily), Amoxicillin (1 G Twice Daily) And Clarithromycin (500 Mg Twice Daily). On The Other Hand, The Second Group Were Prescribed A 10-Day Course Of Modified Bismuth Quadruple Therapy (Mbqt) Fortified With Zinc Carnosine: Tt In Addition To Bismuth Subcitrate (240 Mg Twice Daily) And Zinc Carnosine (75 Mg Twice Daily). A Repeated ¹³C-Urea Breath Test Was Done 4 Weeks After The Completion Of The Eradication Therapy.

Results

There Were No Demographic Differences Between The Two Groups. The Eradication Rate Was 93.5% (43/46) In The Mbqt Group Compared To 69.6% (32/46) In The Tt Group (P = 0.003). Besides Dizziness, Which Was Recorded In Mbqt Group, There Were No Significant Differences In Side Effects Between The Two Groups.

Conclusion

10 Days Of Modified Bismuth Quadruple Therapy Fortified With Zinc Carnosine Is Superior To 14 Days Of Conventional Triple Therapy In Eradicating Helicobacter Pylori Infection, With No Additional Significant Adverse Events.

Op74

Usefulness Of Meld And Meld-Na For Predicting Mortality In Cirrhotic Patients With Spontaneous Bacterial Peritonitis

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Background

Spontaneous Bacterial Peritonitis (Sbp) Is A Common Infection In Cirrhotic Patients With Ascites. Currently, The Accuracy Of The Model For End-Stage Liver Disease (Meld) And Meld-Sodium (Meld-Na) As Prognostic Scores In This Cohort Is Unclear. This Study Aimed To Evaluate And Compare The Accuracy Of Meld And Meld-Na For Predicting 90-Day Mortality And Determine Whether The Mortality Risk Estimates They Provide Accurately Reflect The Poor Prognosis Of Sbp Patients.

Methods

Cirrhotic Patients With Sbp Were Retrospectively Identified From Ascitic Fluid Samples Sent For Microscopy, Culture And Sensitivity Analysis (1/1/18-31/12/20) And A Previous Audit. Meld And Meld-Na Scores At Diagnosis Were Calculated And Associations With 90-Day Mortality Were Assessed Using Univariate Analysis. Receiver Operator Characteristic Curves Were Compared, And Standardised Mortality Ratios (Smrs) Were Calculated By Comparing The Number Of Deaths Observed To The Number Predicted By Meld And Meld-Na.

Results

Of The 567 Patients Identified, 15 Cirrhotic Patients With Sbp Were Included. 90-Day Mortality Was 66.7% (10/15). Only Concurrent Hyponatremia (<135mmol/L) Was Associated With Mortality (6/10 Non-Survivors Vs 0/5 Survivors, P=0.04). The Difference In Meld And Meld-Na's C-Statistic Was Not Significant:0.66 (95% CI:0.35-0.98) Vs 0.74 (95% CI:0.47-1.0) Respectively (P=0.72). Patients With A Meld-Na >18.5 Had Significantly Higher 90-Day Mortality Than Patients With Meld-Na ≤18.5 (88.9% (8/9) Vs. 33.3% (2/6), P=0.05). The Smr (95% CI) For Each Meld Decile Evaluated Was 33.3 (0-79.5), 11.1 (0.2-22.0) And 3.4 (0-7.0) For Scores ≤9,10-19 And 20-29 Respectively. For Each Meld-Na Tertile These Were: 25 (0-59.6), 5.2 (0.1-10.3) And 2.7 (0.1-8.1) For Scores <17,17-26, ≥27 Respectively.

Conclusion

In A Small Cohort Of Cirrhotic Patients With Sbp, The Meld's Accuracy In Predicting 90-Day Mortality Was Limited. Meld-Na's Accuracy Was Higher But Not Significantly. Both Scores Consistently Underestimated Participants' Mortality, Therefore Future Studies Could Evaluate The Accuracy Of Alternative Prognostic Scores In This Patient Group.

Op75

The Evaluation Of Patients With Uninvestigated Dyspepsia With Robotically Maneuvered Magnetically Controlled Capsule Endoscopy (Rmce) Combined With Real-Time Artificial Intelligence-Based Lesion Detection: A Prospective Study

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Background

Capsule Endoscopy Is The Gold Standard, Non-Invasive Method For Examining The Small Bowel. The New, Robotically Maneuvered And Magnetically Controlled Capsule Endoscopy (Rmce) System (Ankon, Anx Robotics) Has Been Developed To Investigate Esophageal, Gastric And Duodenal Disorders.

Aim

To Analyze The Feasibility And Efficacy Of The Ankon Rmce System In Patients With Uninvestigated Dyspepsia In Whom Routine Upper Gi Endoscopy Was Not Indicated.

Patients And Methods: Two Hundred And Seventy Patients With Uninvestigated Dyspepsia Were Prospectively Enrolled. All Subjects Were Under The Age Of 50 Years And Were Free Of Any Alarm Symptoms And Were Submitted To A H.Pylori 13c Urea Breath Test Before The Rmce. The Stomach Was Examined By Manual Control And All Three Standardized, Pre-Programmed Algorithms.

Results

A Total Of 270 Patients Were Examined (Mean Age: 38 Years, F/M:108/162). A Real-Time, Artificial Intelligence-Based Focal Lesion Detection Was Applied During Rmce. H.Pylori Positivity Was Detected In 28.6% Of All Patients. Rmce Of The Stomach Was Negative In 40(14.8%) Or Depicted Minimal Gastritis In 102(37.8%) Patients. Gastritis With Or Without Erosions Were Detected In 76(28.1%) Patients, 45(16.7%) Had Signs Of Duodenal-Gastric Bile Reflux, 25(9.2%) Had Foveolar Hyperplasia, 9(3.3%) Solitary Gastric Polypoid Lesions, 6(2.2%) Proximal Corpus Gastritis, 5(1.9%) Gastric Ulcer, 4(1.5%) Suspected Intestinal Metaplasia, 3 (1.1%) Vascular Abnormalities , And 1 (0.3%) Had A Focal Flat Gastric Lesion Suggestive For Early Malignancy. Based On The Results Of Rmce Gastroscopy With Biopsy Was Indicated And Performed On The Same Day In 31 Cases (11.5%), While 97 (35.9%) Received Medical Therapy With Follow-Up.

Conclusions

Rmce Is A Feasible And Effective Non-Invasive Method For The Visualization Of The Entire Mucosal Surface Of The Stomach In Patients With Uninvestigated Dyspepsia. This Method May Open New Horizons For Upper Gastrointestinal Screening Programs Without Patient Discomfort And Need For Sedation.

Op76

Comparison Of Who Guidelines For Chronic Hepatitis B Treatment Eligibility With Easl And Local Guidelines

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Background And Purpose

The World Health Organization (Who) Established A Criterion To Evaluate The Need For Treatment For Individuals With Chronic Hepatitis B Infection In Low Health Settings. The European Association For The Study Of The Liver (Easl) Treatment Criteria, Based On (Hbv Dna, Liver Enzymes, Histology, Or Fibroscan) As Standard Reference To Provide General Recommendations For The Management Of Chronic Hepatitis B. Therefore, The Aim Was To Assess The Accuracy Of The Who And Local Guidelines In Assessing The Eligibility For Treatment Among Hbv Patients Using The Gold Standard Easl Criteria As A Reference.

Methods

This Is A Cross-Sectional Hospital-Based Study That Included 167 Participants. The Study Population Was All Treatment Naïve Hepatitis B Patients Attending Liver Clinics, Excluding Those With Hiv Or Hcv Co-Infection, Pregnant Ladies, Or The Presence Of Hcc. Data Were Collected Using A Questionnaire Documenting The Socio-Demographic Characteristics And Investigation Including Hbeag, Hbv Dna Level, Platelet Count, Alt, Ast, Abdominal Ultrasound And Fibroscan.

Results

The Mean Age Of The Participants Were 40 ± 15 Years. Hbeag Was Found To Be Positive In 32(19%) Patients. Fifty Percent Participants Were Fulfilling The Easl Guidelines, (45.5%) Were Eligible For Local Guidelines, (26.3%) Met The Criteria For Who Guidelines With Dna, And (21%) Fulfilled The Who Guidelines Without Dna ($P < 0.001$). The Area Under The Receiver Operating Characteristic [Auroc] For Who Criteria With Dna Was 0.606 (0.520 – 0.700) With Sensitivity Of 63% And A Specificity Of 84.3% ($P = 0.015$), While The Local Guidelines Had An Auroc 0.833 (0.767 – 0.898) With Sensitivity Of 87.6% And A Specificity Of 88.0% ($P < 0.001$) And The Who Criteria Without Dna Showed An Auorc 0.517 (0.429 – 0.604) Sensitivity (26.6%) And Specificity (80.7%) ($P = 0.709$).

Conclusion

The Who Guidelines With And Without Dna Have Limited Sensitivity And Specificity In Detecting Hbv Patients Eligible For Treatment.

Op77

The Pattern And Long Term Follow Up Of Covid-19 Related Abnormal Liver Blood Tests

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Objective

Acute Covid-19 Is Well-Known To Cause Abnormalities In Liver Blood Tests (Lbts). This Study Aims To Identify What Are The Long-Term Implications Of Covid-19 On Lbts.

Methods

A Retrospective Cohort Study That Examined The Lbts Of Patients Admitted With Covid-19 Both During Acute Infection And For Up To One Year. R Factor Was Used To Identify Type Of Liver Injury. X² Test And Fisher Exact Was Used For Statistical Analysis With P<0.05 Being Considered Significant.

Results

Data Was Collected On 373 Patients. During Acute Infection, 57.5% Of Patients Showed At Least One Raised Lbt (Alt, Alp And/Or Bilirubin). Male Patients Were More Likely To Develop Lbt Abnormalities Than Females (74.5% Versus 25.5%; P<0.001). Increased Lbt Abnormalities Seen In Patients Requiring Itu Admission Compared To Those With Ward Based Care (87% Versus 51% Respectively; P<0.001). During Short Term (1-5 Months Post Discharge) And Long-Term (>5 Months Post Discharge) Follow-Up, Lbt Abnormalities Were Seen In 31.3% And 24% Of Patients Respectively. In Both The Acute Setting And Long-Term Follow-Up, Cholestatic Or Mixed Injury Types Were Most Commonly Seen (Acute; 41.1%, 41.6% Respectively, Long-Term; 50.0%, 44.4% Respectively) .

Discussion

Our Data Suggests That Up To One In Four Patients Have Persistent Lbt Abnormalities Up To One Year Following Covid-19. Future Research Is Needed To Investigate The Clinical Significance Of This Lbt Abnormalities And Whether There Are Interventions, Pharmacological Or Otherwise, That Could Reduce Covid-19 Related Liver Injury, Both In The Acute Setting, And Longer-Term.

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