ORGANIC DYSPEPSIA – INTESTINAL METAPLASIA – CANCER

Dr Prateek Sharma, USA

Organic dyspepsia is characterized by the presence of an established organic, systemic or metabolic cause with symptoms, and resolution or improvement occurs after addressing the underlying condition. Examples include gastroesophageal reflux disease (GERD), drug-induced mucosal injury, peptic ulcer disease, malignancy (gastric, pancreatic, colorectal), intestinal ischemia, and abdominal aortic aneurysm.

Gastric intestinal metaplasia (GIM) and gastric cancer are the main concerns of untreated/under-treated dyspepsia.

GIM is a premalignant condition of the human stomach with a 10-fold increased risk of gastric cancer.

GIM serves as a histological step before gastric dysplasia.

A high-quality esophagogastrroduodenoscopy with retroflexion and careful inspection of the cardia and fundus is recommended to identify patients who benefit from surveillance.

Around 4-8 biopsies of two topographic sites (at the lesser and greater curvature, from both the antrum and the corpus) should be taken.

The management of GIM involves detailed and careful endoscopy with sampling, stratifying for the severity and extent of chronic atrophic gastritis and GIM, and testing and eradicating Helicobacter pylori. Risk assessment should be individualized through shared decision-making, and endoscopic surveillance every 3 to 5 years is recommended for those at higher risk, focusing on early detection and prevention.

CHOOSING BIOLOGICS AND SMALL MOLECULES IN 2024

Dr Ashwin Ananthakrishnan, USA

The process of picking the right treatment begins with the initial evaluation of the patient, which includes defining the severity of the disease and prognostic factors.

For Crohn’s disease, predictors of an unfavorable course include age 40, the need for steroids in the first flare, perianal disease, upper GI lesions, ileocolonic lesions and stricturing and penetrating behavior.

Similarly, for ulcerative colitis, predictors of an unfavorable course encompass younger age, female gender, extensive colitis, nonsmoking status and low serum albumin.

When deciding on the right treatment in a clinical setting, there are preferences, good options, last choices (not necessarily wrong) and treatments with sparse data.

For moderate to severe luminal Crohn’s disease, the preference is given to infliximab, adalimumab, risankizumab and ustekinumab. Upadacitinib is considered a good option, while azathioprine (?) and vedolizumab are the last choices.

In the case of perianal Crohn’s disease, infliximab is preferred, and good options include adalimumab, vedolizumab, and ustekinumab. Risankizumab and upadacitinib have sparse data on their efficacy and safety.

For individuals with both inflammatory arthritis and inflammatory bowel disease (IBD), the preference is for anti-TNF (tumor necrosis factor) medications. Janus kinase (JAK) inhibitors and ustekinumab are considered good options, while vedolizumab is the last choice. Ozanimods have sparse data on their efficacy and safety.

Similarly, for those with both psoriasis and IBD, preferences include anti-TNF and ustekinumab. Vedolizumab is a last choice, and ozanimod and JAK inhibitors (excluding arthritis) have sparse data on their efficacy and safety.

FUNCTIONAL DYSPEPSIA DEMYSTIFYING FOR CLINICIANS

Dr Shobna Bhatia, Jaipur

Rome IV diagnostic criteria for functional dyspepsia necessitate the presence of one or more bothersome
symptoms such as postprandial fullness, early satiation, epigastric pain, or epigastric burning. Additionally, there should be no evidence of a disease, as determined by negative findings in upper endoscopy, likely to explain the symptoms.

- Immune function, inflammation, and epithelial permeability play a role in functional dyspepsia, with low-grade mucosal inflammation, increased eosinophils and mast cells in the stomach and duodenum, and elevated duodenal eosinophil levels in both epigastric pain syndrome and postprandial distress syndrome cases. A higher incidence of atopy and food allergy is also noted.

- Psychology is intertwined with functional dyspepsia, as anxiety and depression are commonly associated. Stress, whether from pain or psychological comorbidities, can upregulate the hypothalamic-pituitary-adrenal axis, increasing corticotropin-releasing hormone levels and activating local inflammatory processes, potentially affecting gut function, including epithelial permeability, immune function and the microbiome.

- Overlap is a well-established phenomenon in functional GI disorders. Patients with overlap syndromes tend to experience more severe symptoms, with motor dysfunction in one GI tract segment impacting motility in another. Sensorimotor disorders are often generalized, and common mechanisms partially explain the observed overlap.

**BENIGN ESOPHAGEAL STRICURE**

**Dr Kulwinder S Dua, USA**

- Refractory benign esophageal strictures are characterized by fibrotic restriction. Electrocautery shows a 100% response in 1 session for short strictures (<1 cm), while long strictures (1.5-5 cm) require a mean of 3 sessions with no complications.

- Regenerative medicine options include autologous pluripotent cell therapy, fabricated autologous epidermal cell sheets and tissue engineering.

- Esophageal stents demonstrate an overall success rate of 46% to 80%, with lower success rates for upper esophageal strictures ranging from 10% to 30%.

**EUS-GUIDED VASCULAR THERAPY**

**Dr Praveer Rai, Lucknow**

- Visceral artery aneurysms are often asymptomatic and are incidental findings on CT and MRI.

- Mortality from their rupture ranges from 25% to 100%.

- Indications of treatment of true aneurysms include size >2 cm irrespective of anatomical site, symptomatic patients and increasing size of the aneurysm, size <2 cm in women who wish to become pregnant and patients who require liver transplant.

- All false aneurysms should be treated, irrespective of their size or location.

- Complications of endovascular treatment are technical failure to catheterize the artery, arterial thrombosis/embolism, coil migration, aneurysm recurrence, hematoma or pseudoaneurysm at the puncture site and abdominal pain, fever (post-embolization syndrome).

- The role of endoscopic ultrasound (EUS) in vascular therapy is still evolving.

- EUS-guided therapy has high technical and clinical success rates with no significant adverse events. It is effective and less invasive than surgery/percutaneous options.

- It is a day care procedure and does not require general anesthesia and can be done in conscious sedation. It permits precise targeting of aneurysm and precise injection. Less expensive than radiological treatment and can be repeated safely. A multicenter study is needed to further establish its role.

- Despite technical success, there are limitations of a small number of enrolled subjects and poor methodology, varied procedural techniques and lack of large randomized controlled trials.

- Indications should be clearly stated and patients carefully selected. Radiological and surgical back up is a must.

**AVOIDING MISTAKES IN AUTOIMMUNE PANCREATITIS**

**Dr Shounak Majumder, USA**

- Autoimmune pancreatitis (AIP) is classified into two types: Type 1 AIP, known as lymphoplasmacytic sclerosing pancreatitis, is considered the pancreatic manifestation of IgG4-related disease. Type 2 AIP is characterized as idiopathic duct-centric pancreatitis.

- The imaging appearance of AIP is highly suggestive/typical when there is a diffusely enlarged gland with featureless borders, delayed enhancement with or without a capsule-like rim and long or multiple main pancreatic duct strictures without upstream dilation. Supportive/indeterminate features include...
a focally enlarged gland without features highly suggestive of cancer.

- Recognition of relapse in AIP is defined by the development of radiologic findings or biochemical abnormalities consistent with a new or worsening inflammatory process, requiring re-treatment, or an increase in the dose of steroids that was previously being tapered.

- Establishing the diagnosis of AIP can be challenging, and it is crucial to recognize clinical and radiologic features that differentiate AIP from pancreatic cancer.

**Key Points**

- Serum IgG4 elevation is not pathognomonic of AIP and can be elevated in pancreatic cancer.

- Serum CA 19-9 can be falsely elevated in benign cholestasis.

- The presence of main pancreatic duct dilation and vascular invasion favors a diagnosis of pancreatic cancer. Lack of steroid response indicates an alternative diagnosis.

- About a third of patients with AIP have refractory disease and benefit from maintenance therapy.

- Pancreatic atrophy is common and can result in endocrine and exocrine dysfunction.

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**GURU GYAAN: CHAT WITH DR PATRICK KAMATH**

Dr Patrick Kamath, USA

**How will you Find Happiness in Your Career?**

- Finding happiness in your career involves recognizing the distinction between a job, which is short-term, and a career, which is long-term. While a job may lead to leaving work feeling angry, a career aims to leave work with satisfaction. In the context of financial gain, a job helps collect money, whereas a career focuses on accumulating valuable experiences.

- Requirements for a successful career include expertise, a bit of luck, the ability to be a clutch performer, mentorship and maintaining a healthy work-life balance. Being a clutch performer entails traits such as focus, discipline and adaptability, requiring individuals to give their best effort, or 110%, every day despite stress.

- Engaging in meaningful activities to prevent burnout is crucial, dedicating at least 2 hours a day to something that holds personal significance.

- Pro tips for a successful career emphasize the importance of maintaining good health, as a healthy individual can better contribute to the well-being of others. Dream big, continuously learn and prioritize service to patients before self.

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**BLOATERS AND BELCHERS**

Dr Uday C Ghoshal, Kolkata

- Excessive belching, as per Rome IV, is when it is bothersome enough to disrupt usual activities and occurs more than 3 days per week. It may occur either as an isolated symptom or may be associated with GERD, functional dyspepsia, gastroparesis, anxiety, and pregnancy.

- Functional bloating and distension is diagnosed when recurrent symptoms of abdominal illness or pressure or a visible increase in abdominal girth with symptoms at least 1 day per week and active for 3 months, with onset of 6 months and without a predominance of pain and alteration in bowel habits. Bloating too may occur as an isolated symptom, but may also be associated with irritable bowel syndrome (IBS), functional constipation/diarrhea/dyspepsia.

- Abdominal bloating and distension has multiple pathophysiological basis of which gut microbiota, foods and visceral hypersensitivity are most important. Multiple disorders of gut-brain interaction are associated with bloating.

- Belching may be supragastric or gastric in origin. The two conditions differ somewhat in pathophysiological basis and can be differentiated by impedance manometry. A comprehensive history and clinical observation may help to differentiate the two.

- Supragastric belching is a voluntary behavior disorder (aerophagia), while gastric belching is an involuntary disorder (physiologic). Supragastric belch is characterized by too frequent belching (up to 20 per minute); it does not occur during sleep, talking and distraction and increases with stress. Patients with severe and frequent belching often describe that their belching initially started with bloating or a bothersome sensation in the stomach. It is mostly unrelated to meals. The associated comorbid conditions include anxiety and neurosis.

- Gastric belch, on the other hand, is less frequent (few per hour) and occurs with greater force. It occurs after ingestion of meals and CO2-containing beverages. GERD and functional dyspepsia are the usual comorbidities. The principles of treatment are to...
empty the colon, improve motility, restriction of foods that generate gas, and manipulation of gut microbiota.

- Pharmacological treatment includes baclofen (both in supra and gastric belching) and proton pump inhibitors in GERD-associated belching.

REFEEDING SYNDROME

Dr Amit Yelsangikar, Bengaluru

- Refeeding syndrome is a common but under recognized condition.
- Many at-risk patients such as chronic alcoholism, liver disease, chronic pancreatitis, perioperative patients (bowel strictures, IBD, Koch’s), GI cancer (chemoradiotherapy), patients referred for feeding access, will come to GI service.
- The key problems of refeeding are hypophosphatemia, thiamine deficiency, salt and water retention (edema/left ventricular failure). Hypophosphatemia is a life-threatening problem.
- Neuropsychiatric manifestations may occur due to thiamine deficiency (Wernicke’s encephalopathy).
- NG feeding – higher risk than those given IV fluids or parenteral nutrition.
- Baseline evaluation includes labs (blood counts, electrolytes, phosphates, calcium, magnesium), liver biochemistry, KFT, sepsis screen, ECG, Echo, NT-proBNP, chest X-ray, and ultrasound.
- Do not rush to give carbohydrates, exercise caution regarding fluids. Document feeding protocol, adhere to it and audit periodically.

MONITORING IN IBD

Prof Simon Travis, UK

- Inflammatory bowel disease fluctuates between relapse and remission, semi-relapse and semi-remission. Monitoring is covalently linked to outcomes.
- The goal of monitoring is to change the course of the disease, to improve the quality of life (QoL) of the patients and prevent complications.
- Zealots advocate monthly FCal/FBC/CRP, colonoscopy and biopsy 12 weeks after change in therapy, bowel ultrasound in every visit, annual colonoscopy, annual B12/vit D/ferritin, annual MRE for CD and triennial DEXA.
- Pragmatists prefer a different approach (look after your patients and patients will look after you), clinical assessment, FCal if it is unclear whether the symptoms are due to active disease or other causes, Flexi (rather than colonoscopy) if symptoms change and careful discussion on review to check adherence and achieve tailored care for individual patients.
- Monitoring means to observe and check the progress or quality of the disease over a period of time.
- When there are no symptoms, but there is endoscopic (or FCal/CRP activity), talk with the patient, explain that no one yet knows whether treatment escalation is best.
- Check compliance with current therapy. Be guided by the previous pattern of disease, drug safety and patient preference. Make a decision and check disease progression after an interval.
- Remember the patient; our role as HCPs is to care, not just to prescribe therapy. The goals of medicine are to improve the QoL and limit the consequences of the disease. IBD and its consequences are complex, so care becomes complex.

EUS-GUIDED PANCREATIC DUCT DRAINAGE

Dr Vinay Dhir, Mumbai

- Stent selection: Plastic stent (straight/pigtail), fully covered metal stent.
- To position the scope, identify proper dilated main pancreatic duct with good position. Scope direction to pancreatic head in stable position (transgastric or transduodenal). Short distance as much as possible with negative Doppler signal.
- Puncture with 19G FNA needle filled with saline or contrast. Check vessel, intervene with Doppler. 22G needle may be required for thin ducts.
- Select good wire: floppy angled tip with stiff sharp. Slowly manipulate the wire towards pancreatic head direction. Use torque and avoid shearing.