

ease behaviour was no longer significant. Our study found that 35% of patients diagnosed with CD  $\geq 60$  had isolated colonic disease.

It is possible that older patients are diagnosed when asymptomatic or minimally symptomatic during colorectal cancer screening. If this were true, we would expect older patients would have a decreased time between symptom onset and diagnosis. We compared the amount of time elapsed between symptom onset and time of diagnosis by age group. We found that time from symptom onset to diagnosis increased with increasing age. Therefore, it is unlikely that older patients are diagnosed at a pre-clinical stage with colonic disease location as a consequence of screening for colorectal cancer and among older patients, 4 patients with diverticula were more likely to have granulomas (16 vs 13 % of patients without diverticula,  $P < 0,84$ ), but the diagnosis of CD was confirmed by lesions remote from the diverticula in most cases. It is also possible that elderly patients are less likely to undergo small bowel imaging and/or video capsule endoscopy for staging which would limit the detection of small bowel involvement. Our study is limited by the small number of patients diagnosed at  $\geq 60$  years. Since disease duration decreased significantly with age at diagnosis, it is possible that over time older patients will develop more complicated behaviour. Therefore, beside Early resection rates were not higher in older patients, who were less likely to require immunosuppressants or re-admission for CD flares, as compared to younger patients and the rest subjected patients carried out lifestyle modifications and diet therapy. Five-year mortality in older patients was 16 % but was unrelated to CD.

#### **Conclusion**

Our study suggests that patients diagnosed with CD  $\geq 60$  are more likely to exhibit isolated colonic disease location and less likely to have complicated disease, although the latter was not significant by carrying out appropriate diagnosis and treatment. The age specific incidence, clinical features, and prognosis of CD were little higher among the elderly are comparable to those in younger individuals. Colon involvement is more common. Concomitant diverticular disease is common and should prompt a search for CD lesions at other sites to confirm the diagnosis. Older patients are less likely to require immunosuppressants or admission for flares. As per data we associated Five-year mortality in older patients was 16% but was unrelated to CD.

#### **REFERENCES**

1. Малаева, Е. Г. Гастроэнтерология : учеб. пособие / Е. Г. Малаева. Гомель : ГомГМУ, 2017. 122 с.
2. Inflammatory bowel disease in the elderly is associated with worse outcomes: a national study of hospitalizations / A. N. Ananthakrishnan [et al.] // *Inflamm Bowel Dis*. 2009. Vol. 15. P. 182-189.
3. The Montreal classification of inflammatory bowel disease : controversies, consensus, and implications / J. Satsangi [et al.] // *Gut*. 2006. Vol. 55. P. 749-753.
4. Crohn's disease: influence of age at diagnosis on site and clinical type of disease / J. M. Polito [et al.] // *Gastroenterology*. 1996. Vol. 111. P. 580-586.

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#### **UPPER GASTROINTESTINAL CROHN'S DISEASE**

***Tsitko E. V., Sanal Rajani Aadya***

**Scientific adviser: Ph.D., Associate Professor *E. G. Malaeva***

**Educational institution  
«Gomel State Medical University»  
Gomel, Republic of Belarus**

#### **Introduction**

Upper gastrointestinal Crohn's is an under-reported, under-recognized phenotype of Crohn's disease (CD). Compared to patients with an ileocolonic localization, patients with Crohn's disease in the upper gastrointestinal tract more frequently

have colic-like abdominal pain and/or cramps, nausea and anorexia as presenting symptoms and are younger at onset of the disease [1–4]. Upper gastrointestinal CD (UGI-CD) is uncommon and has been reported to range from 0.3 to 5 % of affected adult patients. Though under-reported, and overall less frequent than ileal disease, it is more frequent in the adolescents, which could be secondary to more frequent upper endoscopy, with almost 28 % of adolescent CD patients having UGI involvement. Significantly earlier onset of CD has been found in patients with predominant UGI-CD at diagnosis, and pediatric patients with CD have a higher rate of UGI-CD.

Common symptoms are epigastric pain, nausea/vomiting, anorexia/weight loss, early satiety, bloating and belching. Rare symptoms- anemia, diarrhea, feculent vomiting (gastrocolic fistula), hematemesis, and melena. The diagnosis of IBD depends on clinical, radiographic, endoscopic, and histologic factors. Standard Crohn's disease regimens include 5-salicylic acid, azathioprine, 6- mercaptopurine, methotrexate and steroids.

### **Case report**

A 26 year old female was admitted with complaints of weight loss and epigastric abdominal pain, which is non-radiating, postprandial, and relieved by antacids and food. Endoscopically in EGD macroscopic findings in the stomach such as erosions, aphthous lesions and ulcerations were found. There was also evidence of fibrotic strictures of gastroduodenal outflow. Microscopic features were focal-enhanced gastritis, focal crypt irregularities, fissural ulceration. The diagnosis of IBD was made on clinical, endoscopic, and histologic data.

Serologic studies can be suggestive of different disease processes, but all lack sensitivity and are of limited diagnostic benefit. The common serum antibodies tested include perinuclear antineutrophil cytoplasmic antibody (pANCA), anti-Saccharomyces cerevisiae antibody (ASCA), anti-outer membrane porin C antibody (anti-OmpC), and anti-flagellin antibody (anti-CBir1). Combined ASCA immunoglobulin G or immunoglobulin A positive and pANCA negative.

Endoscopically, Crohn's gastritis can produce a range of morphologic features both microscopically and macroscopically, but most commonly it is identified as superficial, mild, and diffuse inflammation. Endoscopic findings of gastroduodenal Crohn's disease include-edema, erythema, friability, granularity, erosions, aphthous ulcers, thickened folds, mucosal nodularity/cobblestoning, strictures, fistulae, pseudodiverticula luminal narrowing. The finding of a bamboo joint-like appearance in the stomach, characterized by longitudinal inflamed folds with perpendicular erosions and linear furrows, is also pathognomonic for CD. Also granulomas are diagnostic of CD and not seen in UC. Aphthoid erosions and mild inflammation that infiltrates gastric glands are also classically associated with CD and not a feature of UC. Upper GI studies may also elucidate fistulas with the distal small bowel and/or colon.

Computed tomography (CT) scans or magnetic resonance imaging (MRI) studies, but are non-specific for IBD. Enterography is a useful adjunct for evaluating CD and can help diagnose and localize areas of stricturing disease throughout the GI tract. MR and CT enterography are comparably useful diagnostic tests, with the former avoiding the radiation of CT scan. Gadolinium-enhanced MRI and the use of diffusion-weighted imaging may also provide some advantage in the differentiation of fibrotic strictures and acute inflammation. The first pathology noted on double-contrast imaging are aphthous ulcerations, followed by thickened rugal folds, cobble stoning, pseudodiverticula, and strictures-evident by a tubularization of the antrum, pylorus, and duodenum. This scarring is secondary to chronic fibrosis, and resembles a gastroduodenostomy for ulcer disease and coining the term «pseudo-

Billroth 1 appearance». A «ram's horn» sign is rare, but representative on contrast imaging for antral and duodenal bulb disease.

Criteria to diagnose UGI-CD specifically, which consisted of one of the following two criteria: (1) on pathology, the finding of noncaseating granulomatous inflammation of the duodenum with or without coexisting CD at other gastrointestinal tracts sites, and without an alternative systemic granulomatous disorder, or (2) clearly documented CD as another gastrointestinal site and radiologic and/or endoscopic evidence of diffuse inflammatory changes suggestive of CD.

Gastroduodenal CD is initially managed medically, paralleling the treatment of CD elsewhere in the GI tract. A stepwise treatment approach is generally used, where more powerful immunosuppressive agents are added only if the patient progresses through treatment. Initially the patient is started on immunosuppressants (5 — salicylic acid, azathioprine, 6 — mercaptopurine, methotrexate and steroids) and biologics and de-escalating medications as the patient improves. For upper gastrointestinal Crohn's disease antacids, with either histamine H2 blockers or proton pump inhibitors, are the mainstay of treatment. Treating *H. pylori* is paramount once its presence is confirmed.

Elemental enteral nutrition induce anti-inflammatory effects in small bowel and can prolong remission. Proximal enterocutaneous or enteroenteric fistulas, short bowel syndrome, and certain cases of obstruction which are not immediately amenable to surgical treatment may require total parental nutrition. Prior to considering surgery, endoscopic intervention can be used to treat fibrotic structures of Gastroduodenal outflow. Endoscopic balloon dilation also provide durable relief.

Surgical management is the only option for patients not responding to medications, obstruction, fistula or pain. The most common indications for operative intervention in Gastroduodenal crohn's disease are gastric outlet obstruction, refractory pain and bleeding. Gastrojejunostomy with vagotomy is the most popular procedure performed.

### **Conclusion**

Upper gastrointestinal Crohn's remains a rare disease. Many adults remain asymptomatic, possibly because they are being treated for distal Crohn's disease. For the patients who are symptomatic, it will usually improve with medical management, the best results being with use of steroids, and more recently with biologic agents. Though most patients respond to medical therapy, if surgical intervention is needed for gastroduodenal disease it is primarily for obstruction secondary to stricture formation, perforation, or bleeding. Strictureplasty and bypass are both options with comparable morbidity, although bypass has higher reported rates of dumping syndrome and marginal ulceration. Cases of gastroduodenal fistulous disease from active distal disease may involve the stomach or duodenum and are usually managed surgically. Esophageal Crohn's is exceptionally rare, is usually inflammatory, and mainly managed medically, but in severe cases can fistulize to surrounding structures in the mediastinum which may require the highly morbid esophagectomy.

### **REFERENCES**

1. *Schwartzberg, D. M. Crohn's Disease of the Esophagus, Duodenum, and Stomach / D. M. Schwartzberg, S. Brandstetter, A. L. Grucela // Clin Colon Rectal Surg. 2019. Vol. 32. P. 231-242.*
2. *Rezapour, M. Retention associated with video capsule endoscopy: systematic review and meta-analysis / M. Rezapour, C. Amadi, L. B. Gerson // Gastrointestinal Endoscopy. 2017. Vol. 85, № 6. P. 1157-1168.*
3. *Pseudopolyps in inflammatory bowel diseases: have we learned enough? / D. S. Politis [et al.] // World Journal of Gastroenterology. 2017. Vol. 23, № 9. P. 1541.*
4. *Prevalence of inflammatory bowel disease among adults aged ≥18 years in United States, 2015 / J. M. Dahlgamer [et al.] // Morbidity and Mortality Weekly Report (MMWR). 2016. Vol. 65, № 42. P. 1166-1169.*