

Contents

Image of the issue

Severe eosinophilia and hepatic lesion: a rare case of fascioliasis from Greece

*S.F. Assimakopoulos, A. Psilopanagiotti, A. Michail, C. Papakonstantinou, C. Gogos,
C. Labropoulou-Karatza*125

Bile sludge that mimics hydatid cyst membranes: a potential pitfall for ultrasound

T. Kara, E. Akpinar, B. Sarikaya, G. Dagoglu, O. Akhan.....126

Editorial

Gut microbiota, inflammation and symptomatic diverticular disease. New insights into an old and neglected disorder

E.M.M. Quigley127

Original Papers

Second-line and rescue therapies for *Helicobacter pylori* eradication in clinical practice

A. Zullo, V. De Francesco, G. Manes, G. Scaccianoce, F. Cristofari, C. Hassan.....131

Vascular endothelial growth factor expression and microvessel density – two useful tools for the assessment of prognosis and survival in gastric cancer patients

*S. Iordache, A. Saftoiu, C.-V. Georgescu, S. Ramboiu, D.-I. Gheonea, M. Filip,
M. Schenker, T. Ciurea*.....135

Diagnostic yield of capsule endoscopy in a tertiary hospital in patients with obscure gastrointestinal bleeding

*S.T. van Turenhout, M.A.J.M. Jacobs, S.J. van Weyenberg, E. Herdes, F. Stam,
C.J.J. Mulder, G. Bouma*141

Ultrastructural evidence of mucosal healing after infliximab in patients with ulcerative colitis

O.C. Fratila, C. Craciun147

MMR gene expression pattern in sporadic colorectal cancer

*M. Ioana, C. Angelescu, F. Burada, F. Mixich, A. Riza, T. Dumitrescu, D. Alexandru,
T. Ciurea, M. Cruce, A. Saftoiu*155

Access to peginterferon plus ribavirin therapy for hepatitis C in Romania between 2002-2009

L. Gheorghe, O. Pascu, E. Ceausu, I.E. Csiki, S. Iacob, F. Caruntu, I. Simionov, R. Vadan161

Serum hyaluronic acid and laminin as biomarkers in liver fibrosis

H. Parsian, A. Rahimipour, M. Nouri, M.H. Somi, D. Qujeq, M.K. Fard, K. Agcheli.....169

Portal hypertensive enteropathy before and after variceal obliteration: an endoscopic, histopathologic and immunohistochemical study

H.R. El- Khayat, A. El Khattib, M. Nosseir, M.A. Ezz, H. El -Amin, Y.M. Fouad.....175

Review

Practical issues for frozen section diagnosis in gastrointestinal and liver diseases

J.R. Miedema, H.V. Hunt.....181

Case Reports

Acute hepatotoxicity caused by enalapril: a case report

G.H. da Silva, A.V. F. Ribeiro Alves, P. Duques, T. Seva-Pereira, E. Cotrim Soares,

<i>C.A. Fazzio Escanhoela</i>	187
Homozygous G320V mutation in the <i>HJV</i> gene causing juvenile hereditary haemochromatosis type A. A case report	
<i>M.S. Militaru, R.A. Popp, A.P. Trifa</i>	191
Chronic intestinal pseudo-obstruction and neurological manifestations in early adulthood: considering MNGIE syndrome in differential diagnosis	
<i>E. Oztas, Y. Ozin, F. Onder, I. Koral Onal, D. Oguz, C. Kocaeft</i>	195
Ascites as the presenting symptom in a patient with Churg-Strauss syndrome	
<i>A.Y. Adema, A.M. Schilder, T.C.M.A. Schreuder, K. Grünberg, I.E.M. Bultink, C.J.J. Mulder</i>	199
Education in Gastroenterology	
QUIZ HQ 56. A rare cause of acute abdomen	
<i>R. Durai, D. Birch</i>	203
QUIZ HQ 57. Multicentric carcinomas of the gastrointestinal tract	
<i>G. Smira, L. Gheorghe, C. Gheorghe, G. Becheanu, A. Croitoru</i>	204
Clinical Imaging	
Confocal laser endomicroscopy of the colon	
<i>D.I. Gheonea, A. Saftoiu, T. Ciurea, C. Popescu, C.V. Georgescu, A. Malos</i>	207
Endoscopic therapy of Barrett's esophagus and esophageal adenocarcinoma	
<i>M. Tantau, O. Mosteanu, T. Pop, A. Tantau, G. Mester</i>	213
Letters	
Who should be tested for gastroparesis among diabetic patients	
<i>L. Poanta, D.L. Dumitrascu</i>	219
Reply	
<i>V.V. Gumaste</i>	220
Paravaterian diverticula presenting as acute cholangitis in two very elderly patients	
<i>N. Vitturi, F. Simoni, F. De Stefano, R. Orlando, F. Lirussi, G. Realdi</i>	220
Decreased beta cell reserve and higher prevalence of vascular complications in cirrhotics who developed diabetes mellitus	
<i>D. Sampelean, F. Casoinic, O. Orasan</i>	221
Mesalazine induced drug fever	
<i>I. Hatemi, A. Goksu, A. Dobrucali</i>	222
Gastric penetration by an ingested sewing needle with migration to the liver	
<i>H. Bolanaki, M.A. Kirmanidis, N. Courcoutsakis, E.G. Tsalkidou, C. Simopoulos, A.J. Karayiannakis</i>	223
Calendar of Events	225
Guidance for Authors	228
Erratum	232

Original Papers

Second-line and Rescue Therapies for *Helicobacter pylori* Eradication in Clinical Practice

Angelo Zullo¹, Vincenzo De Francesco², Gianpiero Manes³, Giuseppe Scaccianoce⁴, Francesca Cristofari¹, Cesare Hassan¹

1) Gastroenterology and Digestive Endoscopy, “Nuovo Regina Margherita” Hospital, Rome; 2) Gastroenterology Unit, “Riuniti” Hospital, Foggia; 3) Department of Gastroenterology, University Hospital “L. Sacco”, Milan; 4) Digestive Endoscopy, “Umberto I” Hospital, Altamura, Bari, Italy

Abstract

Background & Aims. A levofloxacin-based triple therapy and a rifabutin-based regimen are advised as second-line and rescue therapies in the current Italian guidelines for *H. pylori* eradication. However, no data are available for the efficacy of these treatments in clinical practice. **Methods.** A total of 86 consecutive patients who failed a standard, first-line, triple therapy for *H. pylori* infection were treated with a 10-day triple therapy including omeprazole 20 mg, amoxicillin 1 g, and levofloxacin 250 mg or 500 mg, each given twice daily. Eradication failure patients received a 10-day rescue therapy with omeprazole 20 mg, amoxicillin 1 g, and rifabutin 150 mg, each given twice daily. A further therapeutic attempt was performed with a 14-day, high-dose dual therapy (esomeprazole 40 mg and amoxicillin 1 g, each thrice daily). **Results.** Following the second-line therapy, *H. pylori* infection was cured in 76.4% (95% CI = 67.8-85.0) and 79.5% (95% CI = 70.8-88.2) at intention-to-treat (ITT) and per-protocol (PP) analysis, respectively. After the rescue therapy, bacterial eradication was achieved in 84.6% (95% CI = 65-100). Two patients with persistent infection were successfully cured with the high-dose dual therapy. **Conclusion.** The efficacy of levofloxacin-based second-line therapy seems to be decreasing, whilst rescue therapy with rifabutin would appear a valid third-line therapy, and a high-dose dual therapy may be used as a further rescue therapy.

Keywords

Helicobacter pylori - levofloxacin - rifabutin - rescue therapy.

Vascular Endothelial Growth Factor Expression and Microvessel Density – Two Useful Tools for the Assessment of Prognosis and Survival in Gastric Cancer Patients

Sevastita Iordache¹, Adrian Saftoiu¹, Claudia-Valentina Georgescu², Sandu Ramboiu³, Dan-Ionut Gheonea¹, Monalisa Filip¹, Michael Schenker⁴, Tudorel Ciurea¹

1) Department of Gastroenterology; 2) Department of Pathology; 3) Department of Surgery; 4) Department of Oncology

Research Center in Gastroenterology and Hepatology, University of Medicine and Pharmacy Craiova, Romania

Abstract

Background and aims. The role of angiogenesis in progression and metastasis of gastric cancer has been studied over the last years. The aim of our study was to assess the microvessel density and vascular endothelial growth factor (VEGF) expression in correlation with prognosis, survival and the risk for upper gastrointestinal (GI) bleeding as well. **Method.** We prospectively assessed angiogenesis in 40 patients with gastric carcinoma. Microvessel density was calculated using CD31 and CD34 markers, and VEGF expression was assessed in biopsy samples. The tumor stage was established using imaging methods: CT scan for M and N stage and endoscopic ultrasound for T and N stages. The correlation between pathological markers and tumor stage, survival rate and risk of upper gastrointestinal bleeding was assessed. **Results.** The study included 40 patients with gastric cancer; among them 8 patients presented with upper GI bleeding. The average microvessel density was 10.21 for CD31 and 11.85 for CD34 in all patients. VEGF was positive only in 45% of patients. The microvessel density was higher in patients with advanced TNM stage, and a correlation with the risk of UGIB and survival rate was also found. VEGF expression correlated with TNM stage and with the risk of upper GI bleeding. **Conclusions.** Microvessel density (estimated by CD34) was involved in locally advanced disease, while VEGF was correlated with loco-regional extension and distant metastasis in gastric cancer patients. There was a clear correlation between angiogenic parameters, survival rate and the risk of upper GI bleeding.

Key words

Gastric cancer - microvessel density - prognosis - survival - upper GI bleeding - VEGF.

Diagnostic Yield of Capsule Endoscopy in a Tertiary Hospital in Patients with Obscure Gastrointestinal Bleeding

Sietze T. van Turenhout, Maarten A.J.M. Jacobs, Stijn J. van Weyenberg, Erik Herdes, Fred Stam, Chris J.J. Mulder, Gerd Bouma

Small Bowel Unit, Department of Gastroenterology and Hepatology, VU University Medical Centre, Amsterdam, The Netherlands

Abstract

Background & Aims. Capsule endoscopy is applicable to several clinical conditions, but obscure gastrointestinal bleeding remains the main indication. This study aims at determining the diagnostic yield of capsule endoscopy for obscure gastrointestinal bleeding using a structured terminology in a large cohort in an academic hospital. **Methods.** In this retrospective study, 592 capsule endoscopy procedures performed in a tertiary hospital were analysed using the Capsule Endoscopy Structural Terminology. Main indications were gastrointestinal bleeding (n=142) and iron deficiency anaemia (n=240). **Results.** Capsule endoscopy identified abnormalities in 44% of patients with iron deficiency anaemia and in 58% of patients with gastrointestinal bleeding, resulting in a diagnostic yield of 49% for obscure gastrointestinal bleeding. In 32 patients the cause was found in the stomach and in 8 in the colon. **Conclusion.** Capsule endoscopy evidenced a diagnostic yield of 49% for obscure gastrointestinal bleeding. Repeating endoscopy before capsule endoscopy should be considered since a reasonable proportion of lesions were found outside the small intestine.

Key words

Obscure gastrointestinal bleeding - diagnostic yield - capsule endoscopy - capsule endoscopy structured terminology.

Ultrastructural Evidence of Mucosal Healing after Infliximab in Patients with Ulcerative Colitis

Ovidiu C. Fratila¹, Constantin Craciun²

1) 3rd Medical Clinic, Faculty of Medicine and Pharmacy, Oradea; 2) Electron Microscopy Center, Babes Bolyai University, Cluj-Napoca, Romania

Abstract

Background: Infliximab is a monoclonal anti-TNF-alpha antibody that has been shown to be effective in Crohn's disease therapy. However, data are scarce about the mechanism of action and its efficacy in ulcerative colitis (UC). **Aim:** To assess intracellular changes of the colonic mucosa in patients with UC before and after infliximab treatment. **Methods:** 7 patients (18-65 years, 4 men) with active, refractory, moderate to severe UC (Lichtiger's Clinical Activity Index >6, Endoscopic Index >4) underwent colonoscopy before and 4 weeks after the initial infusion of infliximab 5mg/kg of body weight. Endoscopically obtained biopsy specimens were processed specifically, stained with uranyl-acetate and lead citrate and examined with a JEOL-1010 transmission electron microscope. **Results:** Before treatment we noticed severe alterations of the epithelium: microvilli depletion, shattering of the epithelial junctions, cytoplasmic vacuolization, dilatation of the endoplasmic reticulum, pycnotic nuclei, altered structure of mitochondria and Golgi complexes. Rarefaction of the goblet cells, and abnormal mucus formation and secretion were also observed. The corresponding chorion showed structural alteration of component cells, obstructed capillaries, erythrocyte extravasation, and many plasmocytes and neutrophils. After infliximab, improvement in morphology and function of the epithelial organelles, rich mucus secretion and recovery of the chorionic components were noticed. **Conclusions:** Our study revealed important intracellular alterations of the UC mucosa that were restored after infliximab therapy. These features may contribute to a better understanding of UC pathogenesis and mechanism of action of the anti-TNF-alpha therapies.

Key Words

Ulcerative colitis - pathogenesis - infliximab - ultrastructure.

MMR Gene Expression Pattern in Sporadic Colorectal Cancer

Mihai Ioana^{1,3}, Cristina Angelescu^{1,3}, Florin Burada^{2,3}, Francisc Mixich^{1,3}, Anca Riza¹, Theodor Dumitrescu⁴, Dragos Alexandru⁵, Tudorel Ciurea³, Mihai Cruce¹, Adrian Saftoiu³

1) Department of Molecular and Cellular Biology; 2) Department of Medical Genetics; 3) Research Center in Gastroenterology and Hepatology, University of Medicine and Pharmacy; 4) Department of General Surgery, Emergency Hospital; 5) Medical Informatics, University of Medicine and Pharmacy Craiova, Romania

Abstract

Background and aims: Colorectal carcinoma is the second leading cause of death by cancer in Europe as its incidence increases with life span. Continuing research to detect new highly sensitive and specific noninvasive biomarkers is essential. The aim of this study was to compare 9 mismatching repair (MMR) genes activation levels in normal, polyp and malignant tissues in order to detect a MMR gene expression pattern in sporadic colorectal malignant pathology. **Methods:** MMR mRNA levels were evaluated in tumor - normal tissue paired samples and polyps collected from 29 patients undergoing standard surgical procedures with curative intention. Real-Time quantitative Reverse Transcription PCR (qRT PCR) with TaqMan probes specific to ANKRD17, EXO1, MLH1, MLH3, MSH2, MSH3, MSH4, MSH5, MSH6 gene transcripts were used. **Results:** The general tendency observed was a lower mRNA level of MMR genes in tumor samples compared with the normal tissue, with the exception of EXO1 gene. The number of patients that showed a higher expression of MMR genes in normal tissue was significantly greater than the number of patients that showed a higher expression inside the tumor ($p=0.0024$). ANKRD17 mRNA levels were higher in normal tissue than in tumor for 16 cases, by contrast with only 6 cases of higher mRNA levels in tumor. **Conclusions:** ANKRD17 mRNA appears to be the most sensitive target and may have a potential value as an additional marker for the existing multitarget assay panel for colorectal cancer detection.

Key words

Sporadic colorectal cancer - MMR genes - gene expression - qRT PCR.

Access to Peginterferon plus Ribavirin Therapy for Hepatitis C in Romania between 2002-2009

Liana Gheorghe¹, Oliviu Pascu², Emanoil Ceausu³, Irma Eva Csiki⁴, Speranta Jacob¹, Florin Caruntu⁵, Iulia Simionov¹, Roxana Vadan¹

1) Center of Gastroenterology and Hepatology, Fundeni Clinical Institute of Digestive Diseases and Liver Transplantation, Bucharest; 2) 3rd Medical Clinic, Cluj-Napoca, 3) "Victor Babes" Hospital for Infectious Diseases; 4) Institute of Public Health; 5) National Institute for Infectious Diseases "Prof. Dr. Matei Balș", Bucharest, Romania

Abstract

Background: An overall prevalence rate of HCV infection in Romanian adult population was recently estimated to be 3.23%. The proportion of treated patients with chronic hepatitis C in our country has never been assessed. **Aims:** 1) to analyze the quality and quantity of antiviral therapy delivery; 2) to determine the proportion of patients being annually and ever treated with antiviral therapy in Romania and 3) to identify barriers against treatment of HCV infected-population in Romania. **Results:** The number of annually treated patients remained relatively stable between 2002 and 2007 (1,813 patients treated with pegylated interferon and ribavirin in 2002 and 2,446 in 2007). There was a doubled increase in reimbursed treatment in 2008 and 2009 (4,503 and respectively 4,701 treated patients) due to a special campaign organized to increase awareness and prevention of HCV transmission. The median time to therapy approval varies from county to county; overall it is 10.23 months. A total number of 25,318 patients with chronic C hepatitis were treated between 2002-2009, corresponding to a cumulative proportion of 4.1% of the prevalent cases of HCV infection treated in Romania until 1st January 2010. The main limiting factor of access to antiviral therapy for hepatitis C in Romania remains the lack of funds. **Conclusions:** This is the first analysis of the nationwide practice for treatment of hepatitis C in Romania. Increased public health efforts are required to improve access to antiviral therapy for hepatitis C in Romania.

Key words

Hepatitis C - peginterferon - ribavirin - therapy.

Serum Hyaluronic Acid and Laminin as Biomarkers in Liver Fibrosis

Hadi Parsian¹, Ali Rahimipour², Mohammad Nouri³, Mohammad Hossein Somi³, Durdi Qujeq¹, Mehrdad Kashi Fard⁴, Karim Agcheli⁵

1) Department of Biochemistry and Biophysics, Babol University of Medical Sciences, Babol; 2) Department of Clinical Biochemistry, Shahid Beheshti University of Medical Sciences, Tehran; 3) Liver and Gastrointestinal Diseases Research Centre, Tabriz University of Medical Sciences, Tabriz; 4) Yahya Nezhad Hospital, Babol University of Medical Sciences, Babol; 5) Liver and Gastrointestinal Diseases Research Centre, Gorgan University of Medical Sciences, Gorgan, Iran

Abstract

Background and Aim: Non-invasive methods have been proposed as surrogate markers for liver biopsy. It was shown that serum hyaluronic acid (HA) and laminin (LN) levels increase with the development of liver fibrosis. The aim of this study was to determine serum HA and LN levels cut-off points for predicting liver fibrosis, highlighting their diagnostic value and their changes during treatment. **Methods:** Serum HA and LN levels in chronic hepatitis patients (n=62) and controls (n=20) were assessed by ELISA and liver histopathological parameters were evaluated by the modified Knodell score. **Results:** Mean serum HA (113.4±59.2 ng/ml) and LN (91.9±20.9 ng/ml) concentrations in patients were greater than in controls (46.6±10.5 and 46.1±10.1 ng/ml, p<0.001). A strong correlation between serum HA and LN concentrations with hepatic necroinflammatory lesions was found (p<0.001). A cut-off point of 59.5 ng/ml HA and 52.0 ng/ml LN for the discrimination of patients with liver fibrosis from healthy controls and 102.0 ng/ml HA and 92.5 ng/ml LN for the discrimination of patients with mild from severe fibrosis showed acceptable AUC, sensitivity and specificity. After six months of treatment, a gradual decrease in serum HA and LN levels was observed, however the levels were still higher than those of the controls (p<0.05). **Conclusions:** Serum hyaluronic acid and laminin concentrations increase in liver fibrosis and could be used as a noninvasive biomarker to discriminate between patients with liver fibrosis and healthy individuals.

Key words

Chronic hepatitis - hepatic fibrosis - hyaluronic acid - serum laminin - Knodell score.

Portal Hypertensive Enteropathy Before and After Variceal Obliteration: an Endoscopic, Histopathologic and Immunohistochemical Study

Hisham R EL- Khayat¹, Ahmed El Khattib², Mona Nosseir^{3,4}, Mohamed Aboul Ezz⁴, Hussein El -Amin⁵, Yasser M Fouad⁶

1) Department of Gastroenterology, Theodore Bilharz Institute; 2) Department of Tropical Medicine, Ain Shams University; 3) Department of Pathology, Theodore Bilharz Institute; 4) Department of Gastroenterology, Theodore Bilharz Institute, Cairo; 5) Department of Internal Medicine, Assuit University; 6) Department of Tropical Medicine, Minya University, Egypt

Abstract

Aim: To study portal hypertensive enteropathy (PHE) before and after the obliteration of esophageal varices. **Methods:** 30 patients with portal hypertension and esophageal varices were included. Band ligation was performed for every patient until the obliteration of esophageal varices. Enteroscopy and biopsies from gastric, duodenal and jejunal mucosa were taken at the beginning of the study and after variceal obliteration. Morphometric measurement of mean vascular areas and estimation of tissue vascular endothelial growth factor (VEGF) were also completed. **Results:** The number of patients with enteropathy increased from 6.6% before obliteration to 46.7% after variceal obliteration ($p < 0.001$). Angiogenesis, vascular ectasia and blood extravasation were the main histopathological findings and all increased significantly after variceal obliteration. The mean vascular area of ectatic vessels in the gastric, duodenal and jejunal biopsies also increased after variceal obliteration. The mean VEGF in the gastric, duodenal and jejunal biopsies increased after variceal obliteration. The mean corpuscular volume (MCV) and hemoglobin (Hb) concentration were significantly lower after variceal obliteration. **Conclusion:** the portal hypertensive enteropathic changes increased in frequency and severity after esophageal variceal obliteration with a probability of causing anemia.

Key words

Portal hypertension - enteroscopy - esophageal varices - portal hypertensive enteropathy.

Review

Practical Issues for Frozen Section Diagnosis in Gastrointestinal and Liver Diseases

Jayson R. Miedema, Heike V. Hunt

Department of Pathology, University of North Carolina, Chapel Hill, NC, USA

Abstract

Surgeons frequently utilize frozen sections as a tool to gain information intraoperatively. The use of frozen sections has certain benefits as well as limitations which vary according to the situation. After reviewing the available literature we provide the reader with an idea of when and how to use frozen sections in common situations involving the gastrointestinal tract and liver as well as address the benefits and limitations in each setting.

Key words

Frozen - intraoperative - pathology - gastrointestinal - liver - review - margins.

Case Reports

Acute Hepatotoxicity Caused by Enalapril: a Case Report

Gustavo Henrique da Silva¹, Almerinda Vieira Fernandes Ribeiro Alves², Pedro Duques², Tiago Sev-Pereira², Elza Cotrim Soares², Cecilia Amelia Fazzio Escanhoela¹

1) Department of Pathology; 2) Department of Medicine, Faculty of Medical Sciences, State University of Campinas (UNICAMP), Sao Paulo, Brazil

Abstract

A case of enalapril-induced acute hepatotoxicity with an unusual morphology is described. This morphology was characterized by macro- and microvesicular steatosis associated with neutrophil infiltration and Mallory bodies, occasionally with satellitosis. These alterations were most abundant in zone 1 of the periportal region, less common in zone 2 and rare in zone 3. There was also confluent periportal necrosis with sinusoidal fibrin deposits associated with intense ductal metaplasia and an infiltrate of inflammatory cells that included plasmacytes and a few eosinophils, as well as focal biliary damage. This morphology, that may be referred as „predominantly periportal steatohepatitis”, was distinct from that associated with non-alcohol and alcohol-induced steatohepatitis, both initiated in acinar zone 3 and subsequently extended to other zones.

Keywords

ACE inhibitors - enalapril - acute hepatotoxicity - liver steatosis.

Homozygous G320V Mutation in the *HJV* Gene Causing Juvenile Hereditary Haemochromatosis Type A. A Case Report

Mariela S. Militaru, Radu A. Popp, Adrian P. Trifa

Department of Medical Genetics, "Iuliu Hatieganu" University of Medicine and Pharmacy, Cluj-Napoca, Romania

Abstract

While classical hereditary haemochromatosis, usually associated with mutations in the *HFE* gene, has an adult age onset and a long, progressive evolution, juvenile haemochromatosis, most often associated with mutations in the *HJV* gene, is a more severe, rapidly progressive condition and has an onset before the age of 30. We report a 26-year old woman with a severe iron overload, affected by hypogonadotropic hypogonadism and moderate dilative cardiomyopathy, in whom the molecular analysis revealed a homozygous genotype for G320V mutation in the *HJV* gene. As juvenile haemochromatosis is a severe disease, death usually occurring from cardiac involvement, an efficient iron removal from the body strategy should be started as soon as possible, in order to prevent irreversible damage.

Key-words

Hereditary haemochromatosis - *HJV* gene mutations - genetic testing.

Chronic Intestinal Pseudo-obstruction and Neurological Manifestations in Early Adulthood: Considering MNGIE Syndrome in Differential Diagnosis

Erkin Oztas¹, Yasemin Ozin¹, Fatih Onder¹, Ibrahim Koral Onal¹, Dilek Oguz¹, Cetin Kocaefe²

1) Department of Gastroenterology, Turkiye Yuksek Ihtisas Education and Research Hospital; 2) Department of Medical Biology, Hacettepe University School of Medicine, Ankara, Turkey

Abstract

The mitochondrial neurogastrointestinal encephalomyopathy syndrome (MNGIE) is a rare and life-threatening, autosomal recessive, multisystem disorder, caused by the mutations in the thymidine phosphorylase gene. Herein, we report a case of a 21 year-old male with a long history of intestinal pseudo-obstruction who was diagnosed with MNGIE syndrome after an extensive examination. In this case, our objective was to bring the gastroenterologist's attention to this difficult to diagnose syndrome in the coexistence of intestinal pseudo-obstruction and neurologic manifestations. The patient was a member of a consanguineous family of six children, in whom two sisters had died due to this disorder and one sister was affected and is still alive. The patient presented with cachexia, abdominal pain, diarrhea and muscle weakness, and was previously considered to have gluten sensitive enteropathy and treated with dietary solutions.

Key words

Intestinal pseudo-obstruction - neurologic symptoms - MNGIE Syndrome

Ascites as the Presenting Symptom in a Patient with Churg-Strauss Syndrome

Aaltje Y. Adema¹, Annemarie M. Schilder², Tim C.M.A. Schreuder¹, Karin Grünberg³, Irine E.M. Bultink², Chris J.J. Mulder¹

1) Department of Gastroenterology and Hepatology; 2) Department of Rheumatology; 3) Department of Pathology, VU University Medical Centre, Amsterdam, The Netherlands

Abstract

A 67-year-old male presented with ascites, dyspnoea, peripheral edema and purpura. The history revealed asthma and nasal polyps. The laboratory tests showed an increased peripheral blood eosinophilic cell count. The ascitic fluid analysis showed features consistent with an eosinophilic peritonitis. A skin biopsy revealed eosinophilic vasculitis. Our patient was diagnosed with Churg-Strauss syndrome based on the medical history, laboratory and histology. This case describes ascites as the presenting symptom of Churg-Strauss syndrome.

Key words

Churg-Strauss syndrome - ascites - purpura - vasculitis - eosinophilic peritonitis.

Clinical Imaging

Confocal Laser Endomicroscopy of the Colon

Dan Ionut Gheonea, Adrian Saftoiu, Tudorel Ciurea, Carmen Popescu, Claudia Valentina Georgescu, Anca Malos

Research Center of Gastroenterology and Hepatology, University of Medicine and Pharmacy Craiova, Romania

Abstract

Confocal laser endomicroscopy (CLE) has been recently proposed as a new technique that allows in vivo histologic assessment of mucosa during endoscopy. The most commonly used contrast agents are acriflavine hydrochloride and fluorescein sodium. For colon pathology assessment, the administration of fluorescein intravenously produces a strong staining of both surface epithelium and deeper layers of lamina propria.

Confocal laser endomicroscopy is a feasible method to diagnose colon cancer in vivo. Furthermore, confirmation of neoplastic changes using CLE during colonoscopy may lead to major improvements in the clinical management of the patients with inflammatory bowel disease. Biopsies can be limited to targeted sampling of relevant lesions.

Confocal laser endomicroscopy will certainly play an important diagnostic role during gastrointestinal endoscopy in the future, enabling the elimination of the diagnostic delay associated with conventional biopsy preparation and processing.

Keywords

Confocal laser endomicroscopy - colon cancer - ulcerative colitis - adenomatous polyp.

Endoscopic Therapy of Barrett's Esophagus and Esophageal Adenocarcinoma

Marcel Tantau, Ofelia Mosteanu, Teodora Pop, Alina Tantau, Gabriela Mester
University of Medicine and Pharmacy "Iuliu Hatieganu" Cluj-Napoca, Romania

Abstract

The normal squamous esophageal epithelium reacts as a chronic inflammation to the severe gastro-esophageal reflux. Esophagitis will progress to Barrett metaplasia in 10% of patients who would be of minor clinical interest if it then did not advance to low, high grade dysplasia and invasive carcinoma. The rise of esophageal adenocarcinoma (EAC) incidence surpasses any other cancer, including melanoma, lymphoma and small cell lung cancer. There is no clear proof that medical therapy could prevent the neoplastic progression. It seems that this population has a variable answer to proton pump inhibitors therapy. A multimodal approach of Barrett's esophagus with high grade dysplasia is required, including endoscopic mucosal resection, photodynamic therapy and thermal ablation. Photodynamic therapy could be used for the management of patients with high grade dysplasia, early EAC, local recurrence post radical therapy, microscopic involvement of tumor borders post radical resection, patient unfit / unwilling to undergo surgery. The palliation of non-resectable EAC by stenting represents the first choice. The correction of the malignant esophageal obstruction improves the symptomatology and life quality, but not survival. Because of the dismal prognosis and the frequent treatment failure of conventional treatment strategies, it seems reasonable to look for new palliative strategies.

Keywords

Barrett's esophagus - esophageal adenocarcinoma - endoscopic mucosal resection - photodynamic therapy - palliative therapy.