

COVERING THE COVER

Can the treatment duration be shortened in bismuth containing therapies for *Helicobacter pylori* eradication?

Helicobacter pylori (HP) eradication is a challenging treatment for patient and also for physician. Drug compliance is one of the most important reasons of incomplete treatment. Using multiple drugs for long duration decreases the drug compliance. Besides this, HP eradication with shorter treatment duration is still not clear. In this manuscript, authors compared the effectiveness of the HP eradication treatment between 10 and 14 days with bismuth containing quadruple therapy (BQT) group and moxifloxacin - bismuth combined therapy (MBCT) group. Compliance in 10-days treatment was better than 14-days treatment in both BQT and MBCT groups but it was not statistically significant, also adverse effects were seen significantly lower in 10-days treatment. However, eradication rates were higher in 14-days treatment groups but this difference was not significant too. It is not possible to say 10-days treatment is better and effective than 14-days treatment but it is important to reveal findings about the compliance, effectiveness and side effects with shorter duration of therapies. Shorter treatment duration is also important for decrease the healthcare costs. See page 667.

The role of endoscopic interventions and electroincision in benign anastomotic strictures following colorectal surgery

Colorectal surgery is sometimes complicated with postoperative complications such as leakage, fistula, bleeding or strictures. These complications sometimes can be treated with endoscopic interventions and sometimes needed repeated surgeries. Strictures are also important complications that can be seen 3-30% of patients after surgery and it can cause morbidity and also mortality. There are several endoscopic interventions to deal with postoperative benign anastomotic strictures (POBAS) like bougie or balloon dilatation, corticosteroid injection stent placement or electroincision. Electroincision is a partially novel method in and still is not counting as standard for POBAS treatment. In this manuscript authors presented their patients treated with electroincision and comparing them with other methods. A total of 59 patients presented (11 electroincision, 48 balloon dilatation). Even there was a difference in surgical procedure and etiologies, no difference was seen in postoperative complications between electroincision and balloon dilatation groups. Also, there was no major complication was seen during and after the electroincision. Endoscopic therapies would decrease the need of

repetitive surgeries in future and these studies are important for future tendency in POBAS. See page 673.

Effects of pentasa combined probiotics on the microflora structure and prognosis of patients with inflammatory bowel disease

Intestinal flora plays a role in inflammatory bowel disease (IBD) and also IBD effects intestinal flora. Changing the intestinal flora also using as treatment in IBD, such as fecal transplantation. In this manuscript authors investigated the effect of probiotics as an add-on treatment in IBD. In total 40 IBD patients were investigated and recurrence rate was seen higher in patients did not take probiotics and also disease activity scores were seen improved in patients who took probiotics. Targeting to intestinal flora in IBD treatment is a promising topic but beyond any doubt further studies with prospective controlled design and with larger cohorts need to make clear the gray zones. See page 680.

Fall of another myth for colon cancer: Duration of symptoms does not differ between right or left sided colon cancers

Colorectal cancer (CRC) is one most common reason of cancer death. Like all malignancies, early diagnosis is important in CRC too. Realizing symptoms plays an essential role for applying to a physician for patients. As a *de facto* knowledge, symptoms differ between left and right colon malignancies. In this manuscript authors questioned the classical knowledge and investigated identifying the relationship between symptom duration and localization of the colon cancer and to determine whether localization and stage of the disease is associated with the symptom duration. A total of 1795 patients included prospectively after a diagnosis of CRC. There was no difference was seen in symptom duration and definitive diagnosis time according to the tumor localization. Hematochezia, anemia, changing in bowel habits, abdominal pain, perianal pain and fatigue was seen more common in left colon tumors. Treatment of CRC is a challenging and long procedure. Following the screening program is important for early diagnosis rather than evaluating patients with symptoms. See page 686.

Paritaprevir, ritonavir, ombitasvir, and dasabuvir treatment in renal transplant patients with hepatitis C virus infection

Hepatitis C virus (HCV) infection seen more common in patients with renal transplantation (RT). HCV infection

also can cause proteinuria, chronic rejection, transplant glomerulopathy and HCV-associated glomerulonephritis. However, it is important to treat HCV infection to protect renal graft functions as well as to protect the liver. In this manuscript authors investigate the efficacy and safety of paritaprevir, ritonavir, ombitasvir, and dasabuvir (PrOD) retrospectively. Sustained virologic response after 12 weeks of the treatment was seen in all patients. In RT patients, immunosuppressive drug levels are vital for preserving the transplanted kidney function, drug interactions must be checked carefully for antiviral treatment success and also for preventing rejection of the transplanted kidney. Immunosuppressive drug levels were also kept in therapeutic range successfully during the antiviral treatment. PrOD treatment is safe and effective in RT patients, even those with compensated cirrhosis, as long as the patients are closely monitored. See page 695.

A model to predict early hepatic encephalopathy in patients undergoing transjugular intrahepatic portosystemic shunt

Transjugular intrahepatic portosystemic shunt (TIPS) is an effective and invasive treatment of esophageal and gastric variceal bleeding and also refractory ascites in cirrhotic patients. Due to the transit circulation through the liver, hepatic encephalopathy is (HE) increased in patients with TIPS and sometimes it can be fatal. Therefore, it is important to assess the risk of HE in cirrhotic patients before TIPS procedure. In this manuscript, authors planned a model for predicting early HE after TIPS. Age, Child–Pugh classification, INR, total bilirubin, albumin, fibrinogen, MELD score, and prothrombin time was found significant in predicting early HE in univariate analysis. In multivariate forward stepwise logistic regression analysis also performed in variables found in univariate analysis and age, Child–Pugh class, fibrinogen was found significant in predicting HE. A formula developed with using these variables and the prediction model for early HE after TIPS constructed in this study showed good preliminary predictive ability and stability. See page 702.

Percutaneous transpapillary biliary stent placement for distal malignant biliary obstruction: Outcomes and survival analysis

Distal malignant biliary obstruction (MBO) is commonly caused by pancreatic carcinoma, cholangiocarcinoma, or metastatic carcinoma. At the time of diagnosis many patients are not suitable for surgical therapy. In the course of the disease, cholestasis secondary to biliary occlusion is seen common and biliary stent placement (BSP) is an effective way for dealing with complications of occlusion and hyperbilirubinemia. Infections and re-obstruction

are main complications of BSP. Percutaneous BSP was found better in infectious complications. In this manuscript authors investigated the outcomes of uncovered metal stent insertion via the percutaneous transpapillary method for patients with distal MBO and predictive factors of overall survival retrospectively in 104 patients. In multivariate analysis only metastatic carcinoma compared to ampullary carcinoma ($HR = 3.82; p = 0.015$) and length of biliary stricture ($HR = 1.04; p < 0.001$) were found to be statistically significant independent prognostic factor associated with survival. This study demonstrated that percutaneous transpapillary uncovered metal stent insertion is an effective means of treating patients with distal MBO and has acceptable complication rates. Primary tumor and length of biliary stricture were found to be significant independent prognostic factors associated with survival in these patients. See page 714.

Claudin-9 enhances the metastatic potential of hepatocytes via Tyk2/Stat3 signaling

Understanding the cellular mechanism of malignancies is important for creating future treatment strategies and options. Claudin (CLDN) plays a role in tight junctions and its expression downregulated in tumors. In many different malignancies, expression of CLDN subtypes was seen significantly different from normal tissue. CLDN9 expression was also seen upregulated in hepatocellular (HCC) cell lines and it may have a role on tumorigenesis of HCC. In this study, authors evaluated the impact and mechanisms of CLDN9 in hepatocyte metastasis and to identify novel targets for the HCC treatment and control of early metastasis. A total of 50 patients with liver biopsy included to the study. This study showed expression of CLDN9 increases the metastatic behavior of hepatocytes significantly. Also, the activation of the signal transducer and activator of transcription 3 pathway by tyrosine kinase 2 may be an important mechanism in this increased metastatic behavior. See page 722.

Potential effects of xylopic acid on acetic acid-induced ulcerative colitis in rats

Xylopic acid (XA) is isolated by from the dried fruit of *Xylopiya aethiopica* which is known as anti-inflammatory herbal. It has an analgesic effect due to inhibition of some inflammatory pathways, XA is a good candidate for inflammatory diseases also for ulcerative colitis (UC). In this manuscript authors investigated the therapeutic effect of XA in acetic acid induced colitis in rats. XA was seen effective in suppressing the inflammatory activity in acetic acid induced UC. Body weight was preserved in rats which used XA. Also, disease activity and stool con-

sistency was better in XA group. Lymphocyte and total white cell count were seen lowered in XA group. As a result XA was seen effective in decreasing the inflammatory activity in acetic acid induced colitis and it was shown a promising therapeutic agent in UC experimentally. See page 732.

A bioactive product lipoxin A4 attenuates liver fibrosis by regulating immune response and modulating the expression of regeneration genes in an experimental model

Liver fibrosis (LF) is an important result of many chronic liver diseases such as chronic viral hepatitis, alcoholic and non-alcoholic fatty liver diseases. LF has also a slow progression without any symptoms in the beginning and cirrhosis may appear after a long time period with increasing stiffness. LS is a result of accumulation of different types of extracellular proteins. This accumulation causes immune

activation and hepatocyte damage and increases liver stiffness in time after a chronic period. There are several drugs was studied in LF but currently there is no effective drug to prevent liver from fibrosis specifically. Lipoxin A4 (LXA₄), biosynthesized from arachidonic acid metabolism and it regulates the inflammatory response process. Also, LXA₄ reduces the neutrophil activation and proinflammatory cytokine release. In this animal study, authors investigated histological, immunological and ultrastructural effects of parenteral LXA₄ administration on liver fibrosis. Liver fibrosis was induced by intraperitoneal administration of thioacetamide. LXA₄ had a therapeutic effect in liver fibrosis by decreasing infiltration of mononuclear cells in the liver and inflammatory cytokines in systemic circulation and liver tissue. Also, LXA₄ elevated regenerative capacity of liver tissue with reducing MKK4 expression. See page 745.