
High-resolution video magnifying colonoscopy (MCS) with chromoscopy allows observation of pit pattern on the colorectal mucosal surface. This study assessed whether MCS helps in diagnosis of ulcerative colitis (UC) in patients with clinically inactive disease and its relation with histological findings and mucosal interleukin-8 (IL8) activity.

Subjects with clinically inactive UC (n=113; 64 men; age 18-82 years) were subjected to MCS and grading of pit pattern of the rectal mucosa based on size, shape and arrangement of pits after methylene blue staining. Biopsy specimens from the area where MCS grade was recorded were sent for histology and culture (determination of IL8 content in supernatant). Patients were followed up at 4-week intervals until relapse or to 12 months.

MCS and pit scoring took less than 5 min per patient. The MCS grades were: grade I 19, II 44, III 35 and IV 15. The histological disease activity (p=0.001) and mucosal IL8 levels (p<0.001) had positive correlation with MCS grade. 33 (29.2%) patients relapsed over mean 6.8 (range 1-12) mo. On multivariate proportional hazards analysis, MCS grade was a predictor of relapse (RR 2.06; 95% CI 1.34-3.17; p=0.001). On Kaplan-Meier analysis, relapse rate increased from 0% in grade I to 21% in grade II, 43% in grade III, 60% in grade IV over 12 mo.

This study showed that MCS grading is associated with degree of histological inflammation and mucosal IL8 activity in patients with inactive UC, and is useful tool in predicting relapse. It allows examination of a larger area than that sampled by colonic biopsies.


Hepatitis C virus (HCV) infection may have a role in the etiology of malignant lymphoma. This multicenter case-control study evaluated the association between HCV infection and development of specific lymphoma subtypes.

Cases (n=1807) with lymphoid malignancy were enrolled at 5 European centers from 1998 to 2004. Controls (n=1788) were matched by age, gender and study center. Subjects with HIV infection and history of organ transplant were excluded. Participants who tested positive for anti-HCV were tested for HCV RNA, along with 954 randomly selected anti-HCV negative subjects. HCV genotyping was done in HCV RNA-positive subjects.

Of 94 subjects who had anti-HCV antibodies, 76 were HCV RNA positive. Anti-HCV was detected in 53 (2.9%) lymphoma cases and 41 (2.3%) controls (OR 1.42 [95% CI 0.93-2.15]; p=ns). The risk estimate increased when only patients with HCV RNA positive were considered (OR 1.82 [95% CI 1.13-2.91]; p=0.013).

On subtype analysis, diffuse large B-cell lymphoma was most associated with HCV infection [anti-HCV OR 2.2 [1.23-3.91]; HCV RNA 3.3 [1.79-6.11]]. T-cell lymphoma, Hodgkin’s disease, chronic lymphocytic leukemia and follicular lymphoma were not associated.

This study suggests a positive association of HCV infection and B-cell lymphoma. Chronic B-cell stimulation due to persistent viral infection, leading initially to polyclonal and then to monoclonal expansion of these cells, may be the mechanism for this association.

Lee SM, Yu ML, Lee CM, Chien RN, Sheen IS, Chu CM. Interferon therapy in HBeAg positive chronic hepatitis reduces progression to cirrhosis and hepatocellular carcinoma. J Hepatol 2007;46:45-52

This study was done to compare the long-term outcome in 233 interferon (IFN)-treated and equal number of untreated, matched control patients.

HBeAg-positive subjects with active hepatitis on histology and treated with IFN for 4-6 mo were enrolled. Controls were matched 1:1 with cases in age, gender, baseline ALT, HBV DNA level group (4 groups; <200, 201-500, 501-1000, >1001 pg/mL), follow-up period and time of enrollment. At entry, cirrhosis was present in 8.1% and 10.7% of patients in the IFN-treated and control groups, respectively (p=ns). Subjects were followed up at 3-6 mo intervals to median 6.8 y (range 1.1-16.5).

The cumulative HBeAg seroconversion rate was higher in the IFN group (74.6% vs. 51.7%, p=0.03); nearly two-thirds of the seroclearance events were preceded by exacerbations. HBsAg clearance was observed in 3% and 0.4%, respectively (p=0.03). The cumulative incidence of cirrhosis (33.7% vs. 17.8%, p=0.04), cirrhosis with complications other than HCC (14.6% vs. 3.8%, p<0.001) and HCC (6.9% vs. 2.1%, p<0.025) was higher in untreated controls. The cumulative incidence of cirrhosis was the highest in the non-seroconverter controls (45.3%), and was higher than that in soroconverter controls (13.5%), soroconverters in IFN group (10.4%) and non-soroconverters in IFN group (21.6%). Significant reduction of HCC was observed only in patients with pre-existing cirrhosis (58.9% controls vs 19.7% IFN group). Multivariate analysis showed that IFN therapy, HBeAg seroconversion and genotype B HBV infection were predictors of better long-term outcome.

This study shows that IFN therapy reduces rate of development of cirrhosis and HCC in HBeAg-positive chronic hepatitis B.

Compiled by Anshu Srivastava

The bleeding lesion remains obscure in about 5% of patients with gastrointestinal (GI) bleeding. The authors evaluated 50 patients (20 had associated co-morbid conditions) with obscure lower GI hemorrhage (OLGIB; defined as normal upper GI endoscopy and blood in colon at lower GI endoscopy) and did early surgical exploration (emergency 35; elective 15) and provided management guidelines for such patients when health resources were scarce.

Patients with hemodynamic instability, requiring ≥4 units of blood in 24 h, or ≥6 units blood to maintain hemoglobin at >8 g/dL underwent exploratory laparotomy (with per-operative endoscopy if needed) and excision of the bleeding source (if identified) or right hemicolecotomy. Pre-operative investigations done in few patients included enteroclysis (diagnostic yield in 4/6 patients), nuclear scanning (diagnostic yield 3/11), selective visceral angiography (2/9) and capsule endoscopy (1/1). At surgery, the lesion was localized in 33 patients (jejunum 9; terminal ileum or cecum 24) and was resected. In 17 patients no lesion was found and they had a right hemicolecotomy. Per-operative endoscopy was positive in 8 of 24 attempts with the bleeding site being in the terminal ileum (in the territory of right hemicolecotomy). 8 patients rebled after surgery (3 continued to bleed after initial exploration; 5 rebled after a mean 31 mo). The 30-day mortality was 6 (12%) patients and was due to persistent bleeding (3), liver failure with pre-existing liver disease (2), and chest infection (1). The only factor associated with rebleeding was cirrhosis (p=0.003).

The authors conclude that patients with OLGIB in India are younger and have different causes of bleed compared to those in the West. Patients without cirrhosis should undergo early surgery. The lesion will be obvious in more than half of patients at laparotomy; if not, a right hemicolecotomy should be performed.

Kulkarni S, Vyas S, Supe A, Kadival G (Laboratory Nuclear Medicine Section, Isotope Group, Bhabha Atomic Research Center and Department of Gastrointestinal and General Surgery, Seth GS Medical College and KEM Hospital, Mumbai). Use of polymerase chain reaction in the diagnosis of abdominal tuberculosis. J Gastroenterol Hepatol 2006; 21:819-23

This study evaluated polymerase chain reaction (PCR) test for its diagnostic utility in 50 patients undergoing laparotomy for suspected abdominal TB.

Biopsy material obtained from lymph nodes, mesenteric nodes, mesenteric tissue, bowel wall or any other clinically suspicious material during laparotomy was evaluated by histology (HP) and PCR. PCR for identification of M. tuberculosis amplified a 340-bp nucleotide sequence located within the 38 kDa protein gene of M. tuberculosis. Validation of the PCR technique was carried out using sputum samples from pulmonary TB patients, and had a sensitivity of 90% and specificity of 98%. Of 50 specimens analyzed, 24 were positive for TB by both PCR and HP. 31 were positive and 19 were negative for TB on HP alone, while 30 were positive, 16 were negative and 4 gave inhibitions on PCR alone. 24 of 31 HP-positive samples were positive by PCR, giving a positivity rate of 77%. Of 19 samples that were negative by HP, 6 were positive by PCR, 11 were negative and 2 showed inhibition (specificity 68%). Positive predictive value of PCR test was 80% and negative predictive value was 73%.

The authors conclude that PCR can be used as a diagnostic test for abdominal TB.


Germ-line mutations in the serine threonine kinase 11 (STK11) gene locus have been identified as a major cause of Peutz-Jeghers syndrome (PJS). A previous study on two Indian PJS families did not find any mutation in the STK11 gene and suggested another potential locus on 19q13.4 in one of them. The present study evaluated the nature and importance of STK11 mutations in 10 Indian PJS families.

Peripheral blood samples were collected from the affected (n=16) and unaffected (n=18) members of these families. Polyps from all the patients were subjected to mutation analysis for the detection of a specific mutation in the STK11 gene. No reported mutations in the STK11 gene were observed in the index patients. A novel pathogenic mutation (c.790_793 delTTTG) was identified in the STK11 gene in one index patient (10%) and three members of his family. The mutation resulted in a frameshift leading to premature termination of the STK11 protein at 286th codon, disruption of kinase domain and complete loss of C-terminal regulatory domain.

The study shows a mutation in the STK11 gene for the first time in an Indian PJS family. Such mutations may not explain the disease in the majority. Large genomic deletions or linkage to another locus are possibilities. It is possible to offer genetic testing and counselling and prenatal diagnosis to members of the family. Compiled by Sundeep Shah