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IN BRIEF

HEPATITIS

Early immunological response to IFN α therapy benefits from suppressed HBV replication

Tan *et al.* studied the profiles of 28 chronically infected HBeAg+ patients early in their treatment course. Rapid upregulation of the IFN signalling pathway by PEG-IFN α occurred concurrently with increased detection of IL-15, IL-6, CXCL-10 and upregulated frequency of proliferating NK and activated total CD8⁺ T cells. Inhibiting HBV replication with tenofovir disoproxil fumarate partly compensated for the diminished immune response after the first PEG-IFN α dose.

Original article Tan, A. T. *et al.* Reduction of HBV replication prolongs the early immunological response to IFN α therapy. *J. Hepatol.* doi:10.1016/j.hep.2013.08.020

IBD

Induction and maintenance therapy for ulcerative colitis—vedolizumab more effective than placebo

The potential of the $\alpha 4\beta 7$ integrin antibody vedolizumab as induction and maintenance therapy for active ulcerative colitis has been reported in two integrated randomized controlled trials. At week 6, the response rate was 47.1% for patients receiving vedolizumab at weeks 0 and 2, and 25.5% for those receiving placebo. Clinical remission at week 52 was achieved in 44.8% and 41.8% of patients who continued receiving vedolizumab every 4 or 8 weeks, respectively, compared with 15.9% of patients switched to placebo. The frequency of adverse events was similar for both groups.

Original article Feagan, B. G. *et al.* Vedolizumab as induction and maintenance therapy for ulcerative colitis. *N. Engl. J. Med.* **369**, 699–710 (2013)

BARRETT OESOPHAGUS

Dysplasia recurrence after failed radiofrequency ablation due to clonal selection and persistence

In this longitudinal case series, five patients with Barrett oesophagus and high-grade dysplasia or intramucosal carcinoma had mutations that persisted post radiofrequency ablation (RFA)—in deep oesophageal glands or neighbouring squamous epithelium. *De novo* mutations were found in another three patients who had recurrence of pathology post RFA. The authors conclude, “Overall, recurrence of dysplasia post RFA reflects the multicentric origins of Barrett’s clones and highlights the role of clonal selection in carcinogenesis”.

Original article Zeki, S. S. *et al.* Clonal selection and persistence in dysplastic Barrett’s esophagus and intramucosal cancers after failed radiofrequency ablation. *Am. J. Gastroenterol.* doi:10.1038/ajg.2013.238

COLORECTAL CANCER

Electronic nose can sniff out colorectal cancer and advanced adenomas

In this proof-of-concept study, de Meij *et al.* have shown that analysis of faecal gas by an electronic nose has potential as a noninvasive screening tool for the detection of advanced neoplasia and colorectal cancer (CRC). The faecal volatile organic compound profiles of patients with CRC or advanced neoplasia could be differentiated from those of controls by the electronic nose—with a sensitivity and specificity of 85% and 87% for CRC, and 62% and 86% for advanced neoplasia.

Original article de Meij, T. G. *et al.* Electronic nose can discriminate colorectal cancer and advanced adenomas by fecal volatile biomarker analysis: proof of principle study. *Int. J. Cancer* doi:10.1002/ijc.28446