Nature Reviews Gastroenterology & Hepatology | Published online 9 Dec 2015

IN BRIEF

NASH

A new treatment to LEAN on?

Liraglutide treatment is more effective at resolving NASH than placebo, according to the results of the LEAN phase II clinical trial published in *The Lancet*. Patients with NASH were randomly assigned to receive liraglutide or placebo for 48 weeks. Nine of 23 patients (39%) receiving liraglutide had resolution of NASH confirmed by liver biopsy at the end of study, compared with two of 22 patients (9%) receiving placebo. Fibrosis progression was seen in only two of the patients treated with liraglutide compared with eight patients in the placebo group. Liraglutide was well tolerated, but gastrointestinal adverse events, including diarrhoea, loss of appetite and constipation, were more common in the treatment group than the placebo group.

ORIGINAL ARTICLE Armstrong, M. J. *et al.* Liraglutide safety and efficacy in patients with non-alcoholic steatohepatitis (LEAN): a multicentre, double-blind, randomised, placebo-controlled phase 2 study. *Lancet* doi:10.1016/S0140-6736(15)00803-X

TRANSPLANTATION

Infection complicates small bowel transplant

A retrospective analysis of 69 patients undergoing small bowel transplantation has found that infection is the leading cause of death after the procedure. Despite all patients receiving prophylaxis (antimicrobials), infection was responsible for 17 of 24 deaths during the study period, which comprised a median follow-up of 867 days. Retransplantation (HR 2.21, P = 0.046) and post-transplantation renal replacement therapy (HR 4.19, P = 0.011) were risk factors for the development of opportunistic infection. Renal replacement therapy was also a risk factor for invasive fungal disease (HR 24.9, P < 0.001).

ORIGINAL ARTICLE Silva, J. T. *et al.* Infectious complications following small bowel transplantation. *Am. J. Transplant.* doi: 10.1111/ajt.13535

COLORECTAL CANCER

Serrated polyposis syndrome and colorectal cancer

Serrated polyposis syndrome (SPS) is associated with an increased risk of colorectal cancer. In a new retrospective study published in *Gut*, IJspeert and colleagues found that the 5-year cumulative incidence of colorectal cancer during surveillance in patients who had all SPS lesions cleared (n = 260) was 1.5%, lower than the 6.5% cumulative incidence the authors had reported in a previous smaller study. In addition, the researchers found that a history of smoking was associated with a reduced risk of colorectal cancer (OR 0.36, P<0.001).

ORIGINAL ARTICLE IJspeert, J. E. G. *et al.* Clinical risk factors of colorectal cancer in patients with serrated polyposis syndrome: a multicentre cohort analysis. *Gut* doi:10.1136/gutjnl-2015-310630

NAFLD

NAFLD severity associated with gut dysbiosis

Patients with biopsy-proven NAFLD (n = 57) have gut dysbiosis related to the severity of their disease, according to a new study published in *Hepatology*. Abundance of the genus *Bacteroides* was increased in patients with NASH and those with marked fibrosis. Patients with fibrosis also had an increased abundance of *Ruminococcus*. In an adjusted multivariate analysis, *Bacteroides* abundance was independently associated with presence of NASH and fibrosis, and *Ruminococcus* abundance was independently associated with fibrosis.

ORIGINAL ARTICLE Boursier, J. *et al.* The severity of NAFLD is associated with gut dysbiosis and shift in the metabolic function of the gut microbiota. *Hepatology* doi:10.1002/hep.28356