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IN BRIEF

IBD

Risk stratification in children with Crohn's disease

In paediatric patients, Crohn's disease often presents with an inflammatory phenotype. However, a subgroup of individuals develop complicated disease behaviours (stricturing or fistulizing) over time so a model for predicting the risk of complications is needed to guide treatment decisions. In the latest study, Kugathasan *et al.* performed a multicentre, prospective, inception cohort study in children ($n = 913$) newly diagnosed with Crohn's disease and free of initial complications. After 36 months of follow-up, 9% of patients developed disease complications and a validated risk-prediction model based on clinical, serological, microbial and gene expression factors was found to have a sensitivity of 66%, a specificity of 71% and a negative predictive value of 94%. Also, patients who received early anti-TNF therapy were less likely to have fistulizing complications but not stricturing complications. Thus, this model could identify patients at low-risk of complications and prioritize those that might benefit from anti-TNF therapy.

ORIGINAL ARTICLE Kugathasan, S. *et al.* Prediction of complicated disease course for children newly diagnosed with Crohn's disease: a multicentre inception cohort study. *Lancet* http://dx.doi.org/10.1016/S0140-6736(17)30317-3 (2017)

LIVER

BMI, diabetes and liver disease risk in adolescents

High BMI is associated with increased risk of future severe liver disease, including hepatocellular carcinoma (HCC). However, high BMI predisposes for type 2 diabetes mellitus (T2DM), which is also associated with HCC, but whether the long-term risk of developing severe liver disease is further increased by T2DM was unknown. Now, in a population-based cohort study of 1.2 million men, data on the development of T2DM and liver disease were used to estimate hazard ratios for liver disease mortality and HCC incidence across BMI categories. After a mean follow-up period of 28.5 years, 5,281 cases of severe liver disease and 251 cases of HCC were identified. High BMI in late adolescence was associated with future severe liver disease and HCC, but development of T2DM was associated with an increased risk across all BMI categories, suggesting that men who develop T2DM should be screened for liver disease.

ORIGINAL ARTICLE Hagström, H. *et al.* High BMI in late adolescence predicts future severe liver disease and hepatocellular carcinoma: a national, population-based cohort study in 1.2 million men. *Gut* http://dx.doi.org/10.1136/gutjnl-2016-313622 (2017)

DIARRHOEA

Low-cost rotavirus vaccine shows efficacy in Niger

Rotavirus gastroenteritis results in ~37% of deaths caused by diarrhoea worldwide, but the cost and supply of available vaccines prevents their use in some countries, such as sub-Saharan Africa. A cheaper, live, oral bovine rotavirus pentavalent vaccine (BRV-PV) has now been developed and tested in a randomized, placebo-controlled trial in Niger. Healthy infants received three doses of either BRV-PV or placebo at 6, 10, and 14 weeks of age; the primary end point was the efficacy of vaccine versus placebo against a first episode of severe rotavirus gastroenteritis. Of 3,508 infants included in the per-protocol analysis, there were 31 cases of rotavirus gastroenteritis in the vaccine group and 81 cases in the placebo group. Thus, BRV-PV had an efficacy of 66.7% against rotavirus gastroenteritis. No significant between-group differences in the risk of adverse events were found.

ORIGINAL ARTICLE Isanaka, S. *et al.* Efficacy of a low-cost, heat-stable oral rotavirus vaccine in Niger. *N. Engl. J. Med.* http://dx.doi.org/10.1056/NEJMoa1609462 (2017)