

Rogha M, Najafi N, Azari A, Kaji M, Pourmoghaddas Z, Rajabi F, Rezaee M. (Islamic Azad University, Iran). **Non-Alcoholic Steatohepatitis in a sample Iranian Adult Population.** *Int J Prev Med* 2011; 2: 24-27.

Professor Roghan and his teams' objective in this study was to assess the prevalence of Non Alcoholic Steatohepatitis (NASH) in a sample population in Iran. They also wanted to highlight any risk factors for the condition. 2030 patients attending for a health check up were assessed and all those with raised liver enzyme with no other attributable cause were assessed further.

234 patients were included with raised ALT levels. These patients were rechecked at 6 months and 56 of these patients had persistently elevated ALT levels. The patients were then investigated with ultra sound scanning.

The study found that prevalence NASH was comparable to western studies at 3.3% of general population. The study also found that increasing age correlated with rising ALT levels. Therefore concluding age is a probable risk factor for NASH. This raises the question of whether earlier intervention may improve patient outcome.

Bacon BR, Gordon SC, Lawitz E, Marcellin P, Vierling JM, Zeuzem S, Poordad F, Goodman ZD, Sings HL, Boparai N, Burroughs M, Brass CA, Albrecht JK, Esteban R. (Saint Louis University School of Medicine, St. Louis). **Boceprevir for previously treated chronic HCV genotype 1 infection.** *N Engl J Med* 2011; 364: 1207-17.

Bacon and his team carried out an interesting study comparing the use of Peginterferon-Ribavirin in chronic Hepatitis C genotype 1 patients with a combination treatment of Peginterferon-Ribavirin and Boceprevir. Often, patients with Hepatitis C that do not have a sustained response with peginterferon-ribavirin do

not respond well on retreatment. This study therefore looked at the response of patient previously treated with peginterferon-ribavirin without sustained response.

Patients were randomly allocated into three groups. One control group receiving peginterferon-ribavirin and a placebo. The other two groups received peginterferon-ribavirin and Boceprevir for variable amount of time.

There was a significant increase in the percentage of patients with sustained virological response in the Boceprevir groups compared to control groups. However, anaemia was at a significantly higher rate in the Boceprevir group with 46% of patients having problems.

The use of combination therapy appears to be useful in the retreatment of patients with chronic Hepatitis c genotype1. However, the complications of this treatment may need further investigation.

Pimentel M, Lembo A, Chey WD, Zakko S, Ringel Y, Yu J, Mareya SM, Shaw AL, Bortey E, Forbes WP. (Cedars-Sinai Medical Center, Los Angeles, USA). **Rifaximin therapy for patients with irritable bowel syndrome without constipation.** *N Engl J Med* 2011; 364: 22-32.

Theory suggesting changes in gut flora may contribute to the symptoms of IBS led to this study into the use of the minimally absorbed oral antibiotic Rifaximin. This double blind multi centre trial randomly allocated patients into a control group, or received a 14 day course of Rifaximin 550 mg TDS. Patients with Irritable bowel syndrome without constipation were included in the study.

Self reported symptoms were assessed at the end of this treatment. Patients were followed up for a further 10 weeks and a global assessment of their symptoms carried out weekly including bloating.

The results of this study are promising with a significantly higher number of patients reporting relief of symptoms compared to the control group

at 4 weeks. The treatment group did not report any higher incidence of complications from therapy. One of the most interesting results was a significant reduction in bloating compared to control groups. This symptom has been highlighted as the most difficult to treat.

The use of antibiotic therapy for IBS may well be supported by evidence in this trial but in many areas its use is not yet licensed.

Heijtz RD, Wang S, Anuar F, Qian Y, Björkholm B, Samuelsson A, Hibberd ML, Forssberg H, Pettersson S. (Karolinska Institutet, 171 77 Stockholm, Sweden). Normal gut microbiota modulates brain development and behavior. Proc Natl Acad Sci USA. 2011; 108: 3047-52.

Heijtz and his team looked into the relationship between gut flora exposure and behavior as an adult in mice. Two types of mice were used, one group with no exposure to gut flora (germ free mice) and a second with normal gut flora. The mice were then assessed for signs of anxiety and motor function as adults.

The study highlighted significantly higher rates of anxiety and reduced motor function in the mice with normal gut flora. Germ free mice showed less evidence of anxiety and increased motor function.

They were also able to link a change of gene expression with the different flora exposure. These genes are known to be involved with anxiety related behavior. This study adds to the theory that gut flora population in infancy affects adult behavior and development of neuronal pathways. Obviously how far these mice models can be applied to humans is still to be addressed.

Adibi P, Mollakhalili P, Fallah Z, Daryani NE, Ajdarkosh H, Khedmat H, Derakhshan F, Karbassi A, Ashkzari M, Tavakkoli H. (Isfahan University of Medical Sciences, Isfahan, Iran) Promising Effect of Infliximab on the extent of involvement in Ulcerative Colitis. J Res Med Sci 2011; 16: 6-15.

This study took 18 patients with a clinical exacerbation of UC while on background medication including two of the following, prednisolone, AZT/6MP and 5ASA. Patients then

received a full colonoscopy and the severity of their flare up graded.

They then received a course of infliximab over a six week period. Two further colonoscopies were carried out and their disease severity noted. This showed that 33% of these patients had a reduction in the extent of colon involvement, and included one patient with no evidence of colitis.

Unfortunately, there was no control group in this study and therefore the significance of results is difficult to interpret. There is therefore a need for further assessment of the use of infliximab for exacerbation of UC while on significant background treatment.

Malfertheiner P, Bazzoli F, Delchier JC, Celiński K, Giguère M, Rivière M, Mégraud F; Pylera Study Group. (Otto-von-Guericke-Universität, Magdeburg, Germany). Helicobacter pylori eradication with a capsule containing bismuth subcitrate potassium, metronidazole, and tetracycline given with omeprazole versus clarithromycin-based triple therapy: a randomised, open-label, non-inferiority, phase 3 trial. Lancet 2011; 377: 905-13

As there have been recent reports of increased resistance to H.Pylori eradication, this German team assessed the use of quadruple therapy against the more traditional clarithromycin triple therapy. The phase 3 trial assessed the triple capsule containing bismuth subcitrate potassium, metronidazole and tetracycline with omeprazole against clarithromycin, amoxicillin and omeprazole.

(13C) Urea breath tests were carried out at day 28 and 56 post therapy with two negative results recorded as successful eradication. Complications of therapy were also analyzed in the study. Quadruple did show higher rates of eradication at 80% compared to 55% on triple therapy. Rates of complications were similar between the two groups. This new treatment may therefore be beneficial but cost implications and other factors have to be considered.

Sotoudehmanesh R, Hooshyar A, Kolahdoozan S, Zeinali F, Shahraeeni S, Keshtkar AA. (Tehran University of Medical Sciences, Tehran, Iran). Prognostic value of endoscopic ultrasound in acute pancreatitis. Pancreatology 2010; 10: 702-706.

This study looked at 114 patients diagnosed with pancreatitis within one centre. The patients were scored against the Atlanta criteria clinically to determine severity. All patients diagnosed with pancreatitis were included in the study and received an endoscopic ultrasound. Clinical

severity and USS findings were compared using single and multivariate analysis. A number of different criteria on the USS were assessed systematically.

In conclusion the study found that only the presence of peripancreatic oedema in the EUS correlated to severity of disease with multivariate analysis. Using single variant analysis, more USS changes were linked prognosis including common bile duct dilatation and ascites.

EUS may therefore be useful in predicting severity and prognosis in the early stages of pancreatitis.

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News editor