Clinical Practice

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Age-related symptom correlation with 24 hour ambulatory pH monitoring

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Background Gastro-oesophageal reflux disease is a common condition found in children. A frequent method for confirming a diagnosis of gastro-oesophageal reflux is 24 hour ambulatory pH monitoring. The aim of this study was to investigate the relationship between clinical assessment and pH monitoring.

Methods Patients (aged 0–18 yr) referred to the Women's and Children's Hospital from 2000–2005 for 24 hour pH monitoring were selected for this study. Symptoms and reason for referral were recorded and patients were classed as positive for acid reflux if pH was <4 for >5% of the monitoring time. Symptoms were compared between pH positive and negative patients.

Results 1198 patients were referred for pH monitoring (n = 434 aged 0–2 yr, n = 764 aged 2–18 yr). The most common symptoms for referral for 0–2 yr were irritability/crying (50.7%), poor feeding/gagging (22.8%) and vomiting/spills (24.7%) and for 2–18 yr stomach/epigastric pain (28.5%), cough or throat clearing (17.8%) and vomiting/spills (16.2%). Acidic reflux was significantly more common in the younger age group compared to the older age group (60.1% v. 32.1% respectively, $p < 0.001$, $\chi 2$). Irritability/crying was more common in 0–2 yr age patients with acid reflux compared to those without (58% vş 40% respectively, $p < 0.001$). No other differences in symptom prevalence were observed.

Conclusions Patients referred for 24 hour pH probe monitoring aged 0–2 yrs are more likely to have a positive result compared to those aged between 2–18 yrs. Treatment on symptom assessment is less likely to be effective in the older age group and other possible causes and underlying conditions need to be considered.

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Anti-*MAP* therapy in the treatment of active Crohn's disease

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Introduction *Mycobacterium avium paratuberculosis* (MAP) causes Crohn's-like Johne's disease in animals. Molecular and culture evidence implicates MAP as the pathogen of Crohn's disease (CD). Theoretically, appropriate antibiotics should improve activity of CD. This retrospective review determined the effects of combination anti-MAP therapy on clinical, endoscopic and histologic parameters of CD severity, and examined the factors that influence response to anti-MAP therapy.

Methods 52 patients with active CD (29M, 23F; 13–76 y) received rifabutin (600 mg/d), clofazimine (100 mg/d) and clarithromycin (1 g/d) for between 6 months and 9 years. Patients were started on a ramp-up dosing schedule. Crohn's Disease Activity Index (CDAI) and endoscopic activity were used to measure response prior to commencement and at the latest clinical visit. Patients with active endoscopic CD but low CDAI were assessed on degree of mucosal healing and improvement of histology and specific symptoms.

Results Overall, the combination anti-MAP therapy resulted in a significant reduction in CDAI scores of ≥70 (60% of patients, $p < 0.0001$). Significant decreases in CDAI scores were obtained in patients with baseline CDAI scores >200 ($p < 0.0007$), 150 – 200 ($p < 0.009$) and <150 ($p < 0.0001$). Of the 52 patients, global CDAI scores for 8 patients did not decrease following anti-MAP therapy and global CDAI scores for 13 patients decreased by <70. In the majority of patients in these subgroups, individual symptoms, such as mucosal healing, abdominal pain, or diarrhoea improved. Baseline CDAI score had a significant effect on response between responders and non-responders ($p < 0.02$). However, age, disease duration, previous surgery and concomitant treatment did not significantly influence response to anti-MAP therapy.

Conclusions Anti-MAP effectively improved CDAI scores at high significance across all severity groups. Effectiveness of the therapy did not vary between patients of different ages, sex, disease duration, previous surgery, site of disease and concomitant medications. Those without CDAI reduction or with non-significant CDAI reduction nevertheless demonstrated marked improvement in mucosal healing, abdominal pain and diarrhoea.