PWE-022

BIOLOGICAL THERAPY FOR PAEDIATRIC IBD: EFFECTIVE BUT ASSOCIATED WITH FINANCIAL AND SAFETY ISSUES

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Introduction Biological agents are increasingly used as treatment for paediatric inflammatory bowel disease (IBD) in the UK, yet the evidence base is very limited and safety concerns are rising. We aimed to evaluate pattern of usage, effectiveness and safety in the clinical setting using a Scottish national framework.

Methods Usage of the biological agents infliximab (IFX), adalimumab (ADA) and natalizumab (NAT) for treatment of paediatric IBD (aged <18 years of age at start of biological therapy) from 1/1/00 to 30/04/10 was collated in a retrospective audit. Treatment was administered by members of the Scottish Society of Paediatric Gastroenterology, Hepatology and Nutrition (all regional academic paediatric centres and interested DGHs in Scotland).

Results 112 children had 1 or more biological agent administered from a median (range) age of 14.3 (6.6–17.9) years; 50 (45%) were female and 102 (91%) had Crohn's disease (CD), 8 (7%) had ulcerative colitis (UC) and 2 (2%) had inflammatory bowel disease unspecified (IBDU). Twenty-two (20%) had trials of 2 biological agents. 104 children (98 CD) had IFX, with a median (range) of 4 (1–25) infusions and almost all with moderate-severe IBD. 38 entered remission, 34 responded and 32 had no response. 11 of the 46 (24%) proceeding to maintenance IFX required escalation of therapy. 14 (13%) had infusion events with 3 having anaphylaxis and 7 reactions led to discontinuation. 1 child developed a lupus-like reaction requiring prolonged hospitalisation and 1 had severe infection, with no deaths. 19 (18%) proceeded to ADA. 23 children (all CD) had ADA therapy (including 19 after IFX, 2 as first biological and 2 with inflammatory arthritis in whom CD developed while on etanercept), with a median of 20 doses and nearly all with moderate-severe IBD. 11 entered remission, 6 responded and 6 had no response. All proceeded to maintenance and 11 (50%) required escalation of therapy. 13 had pain at injection site and none had reactions leading to discontinuation. 1 child developed leucopaenia and 1 had a severe viral infection, with no deaths. 2 children with CD had NAT, both in a trial, and both proceeded to IFX after the agent was withdrawn.

Conclusion Our nationwide 'real-life' experience shows that biological agents are effective in moderate-severe paediatric IBD in the clinical setting, but there are significant financial issues (need for dose escalation or multiple biological usage), as well as safety issues.

Competing interests None.

Keywords adalinumab, inflammatory bowel disease, infliximab, paediatric, side effects.