Poster Presentations

Gastroenterology: Inflammatory Bowel Disease

PO-G-0228

GOLIMUMAB IN PAEDIATRIC PATIENTS WITH CROHN'S DISEASE REFRACTORY TO PREVIOUS TUMOR NECROSIS FACTOR ANTIBODY

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Objectives and Study: Treatment with antibody to tumor necrosis factor (TNF)-ńsuch as infliximab (IFX) or adalimumab (ADA) is associated with inducing and maintaining clinical remission in children with Crohn's disease (CD). There are no data about the use of a third introduced subcutaneous TNF antibody, golimumab, in the treatment of paediatric CD.
We evaluated the efficacy of golimumab for children with moderate/severe CD who failed previous treatments with TNF antibody.
Methods: Retrospective data analyses were done in all 7 (5 girls) children who received golimumab at a median age of 17 years for a median of 7.2 months. Before golimumab, they have received IFX for median of one year (range:0.5-1.9) and ADA for median of 1.4 year (range:0.3-3.3). Paediatric Crohn's disease activity index (PCDAI), full blood count, inflammatory markers, use of corticosteroids and adverse events were recorded.
Results: With golimumab treatment 5 of the 7 children were PCDAI responders and 2 entered remission (PCDAI< 10). There was a significant increase in haematocrit after 2 weeks, (p=0.04), faecal calprotectin was significantly reduced after 4 weeks of golimumab compared to baseline (p=0.05). Out of five children, steroid withdrawal was possible in one and steroid reduction in two cases. There were no serious side effects in the study subjects.
Conclusion: Golimumab induced and maintained clinical response in the majority of children with moderate/severe CD who failed previous treatment with IFX and ADA. The majority of children were PCDAI responders, in most of them steroid sparing was possible. Golimumab might be a well-tolerated and effective rescue therapy in refractory CD even if previously treated with TNF antibodies.
References:

Disclosure of Interest: None Declared

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EXTRA-INTESTINAL MANIFESTATIONS ASSOCIATED WITH MUTATIONS IN THE IL-10 PATHWAY

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Objectives and Study: Loss of function in the IL-10 axis in infancy results in severe enterocolitis and extra-intestinal manifestations, the latter currently remain ill-defined.
Methods: Clinical history and results for 3 patients with IL-10 axis dysfunction, identified between 2010 to 2012, were reviewed.
Results:

Pt	Age	Mutation	Origin	Colectomy	HSCT	Respiratory	Sensorineural Hearing Loss	Other
1	8y	IL-10	Northern Pakistan	16m	4y	Bronchiolitis wheeze, emphysematous bullae	moderate-3y	Microcephaly Eczema
2	4y	IL-10	Northern Pakistan	-	14m	Wheeze		Klebsiella sepsis Eczema
3	1y	IL-10Rń	Indian	-	10m	Respiratory failure		Inotrope-sensitive

Table 1: Clinical history and systemic analyses.

Impaired mucosal/skin defence: A predominance of upper respiratory symptoms (4 with intermittent symptoms and 1 had HFOV+NO with a febrile episode) in early childhood were recorded. Sensorineural hearing loss in early childhood was detected following developmental concerns. Recurrent and severe infections, including Klebsiella sepsis requiring PICU admission, indicated increased susceptibility to infections. Eczematous lesions seen were resistant to conventional topical treatment, suggesting compromised skin immunity.

Impaired adaptive immunity: Low T (CD3, CD4 and CD25) and B (CD19) cells counts, and PHA stimulation test were recorded. Raised IgA seen in all patients confirm mucosal immune dysfunction. IgM, IgE, IgG1 and IgG3 were also variably increased. EBV-driven lymphoma occuring later in immunosuppressed, non-transplanted patient has been reported. Severe infections in infancy is likely to have contributed to microcephaly seen in a patient.
Conclusion: In addition to its well-established effects on gut homeostasis, defects in the IL-10 pathway leads to immune deficiency and impaired mucosal defence. Understanding this rare disease may enable prompt referral to other specialists and early treatment. It also offers to opportunity to better understand childhood IBD.

Disclosure of Interest: None Declared

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IMPACT OF CONCOMITANT IMMUNOMODULATOR USE ON FORMATION OF ANTIBODIES TO INFLIXIMAB IN PAEDIATRIC CROHN'S DISEASE

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Objectives and Study: Combining infliximab with immunomodulating therapy, including azathioprine and methotrexate, may reduce the risk of antibody formation directed against infliximab. [1] [2] [3] [4] Antibodies to infliximab (ATI) have been associated with loss of response in adults [5], but studies in children are limited. The objective of this study was to evaluate the impact of concomitant immunomodulator use (combination therapy vs infliximab monotherapy) on ATI formation and the impact of ATIs on developing loss of response in children with Crohn's disease.
Methods: From two academic centres in the Netherlands, we collected clinical, biochemical and histological data of children diagnosed with Crohn's disease treated with infliximab between 2009 and 2014.
Results: A total of 101 children were identified (67 men, median age at start of infliximab 13 years) of whom 39 patients received exclusively combination therapy. Median duration of infliximab treatment was 29 months, including 12 months combination therapy. Ten patients developed ATIs (2 had combination therapy at that time, 8 received infliximab monotherapy after initially combination therapy in 7 of 8 patients). Seven out of 10 patients (70%) developing ATIs had loss of response, versus 18 of 91 patients (20%) without ATIs (p=0.0005).
Conclusion: Also in children, ATIs are associated with loss of response. Since most patients with ATIs were on infliximab monotherapy, our data suggest that combination therapy may prevent ATI formation and hereby loss of response.
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