

O06 INFLIXIMAB-INDUCED PSORIASIS IN PAEDIATRIC CROHN DISEASE; EXPERIENCE AT A TERTIARY CENTRE AND A POTENTIAL ASSOCIATION WITH A VARIATION IN THE IL-23 RECEPTOR GENE

M. Sherlock*¹, T. Walters¹, A. Muise¹, M. Zachos¹, A. Griffiths¹

¹*Division of Gastroenterology, Hepatology and Nutrition, The Hospital for Sick Children, Toronto, Canada*

Background: New-onset psoriasis has been reported in adult Crohn Disease (CD) patients treated with infliximab (IFX). We reviewed the prevalence of new onset psoriasis in paediatric IFX-treated CD patients and examined the role of polymorphisms in the interleukin 23- receptor (IL-23R) gene, known to contribute to both CD and psoriasis susceptibility.

Methods: The medical records of all IFX-treated CD patients were reviewed. DNA from those developing psoriasis was compared with that of disease-matched controls to examine the association of IL-23R polymorphisms. **Results:** 118 children received IFX from 2000 to 2008. Thirteen children (11%), (9 males) developed psoriasis following IFX therapy. The median duration of IFX exposure was 1. year (IQR 0. – 2.). 11 of 13 responded well to topical steroids and successfully continued IFX. DNA was available on 8 of the 13 patients with psoriasis, 137 disease-matched controls and 86 ulcerative colitis (UC) patients. 75% of cases were homozygous for the IL-23R rs10489629 single nucleotide polymorphism compared with 42% of CD controls and 28% of UC controls, with an allele frequency of 88%, 65% and 53% for cases, CD controls and UC controls respectively. The odds ratio for an IFX-exposed patient developing psoriasis was 3. for heterozygotes and 14 for homozygotes ($p=0.7$). **Conclusion:** The frequency of new-onset psoriasis in this IFX-treated paediatric cohort mirrors that of adult series. We found a trend towards an association with a variation in the IL-23R gene; the true significance warrants further investigation in large, adequately powered studies.