PO97
THE USE OF INFlixIMAB IN THE TREATMENT OF REFRACTORY INFLAMMATORY BOWEL DISEASE IN CHILDREN
F. Kiparissi1 *, M. Elawad1, K. Lindley1. 1Paediatric Gastroenterology, Great Ormond Street Hospital, London, United Kingdom
Aim: The aim was to assess indications and clinical responses to the use of Infliximab in children with refractory inflammatory bowel disease (CD, UC, IC and others) to conventional medical treatment.

Methods: We reviewed 50 case notes, median age 14.75 years (range 1.6 to 19.9y, 28 male) in a 6 year period in our hospital.

Results: The overall clinical response to Infliximab was 86% (36 patients, n = 42). Indications were Crohn’s disease only (CD), response 16 out of 17 patients, fistulising CD 5/6, CD with Orofacial granulomatosis (OGF) 4/4, CD with Juvenile idiopathic arthritis (JIA) 2/2, Ulcerative colitis (UC) 4/5, Indeterminate colitis (IC) 4/5 and others 1/3. Median age at first Infliximab infusion was 13.9y (range 1.5 to 17.10y). Median duration of infusions was 9 months (range 1 to 33). 2 patients with UC and 2 with IC received additional Basiliximab infusions, for intractable bleeding and treatment failure. 32 patients (n = 50) had some form of immundysregulation. 38 patients (n = 46) received the standard regimen of infusions at weeks 0, 2 and 6 and then 8-weekly thereafter at a dose of 5 mg/kg. All patients (n = 50) were on at least 2 immunosuppressive medications at 1st Infliximab infusion, 31 patients had 3 or more. None of the above patients had adverse reactions.

Conclusion: Our findings suggest that Infliximab is an efficacious and safe treatment for intractable IBD and should be considered in patients unresponsive to conventional treatments.

PO98
PREVENTION OF ACUTE ADVERSE EVENTS RELATED TO INFlixIMAB INFUSIONS IN PEDIATRIC PATIENTS
P. Lahdenne1, A. Wikström1, K. Aalto1, K. Kolho1 *. 1Hospital for Children and Adolescents, University of Helsinki, Helsinki, Finland
Background: Acute adverse events related to Infliximab infusions are challenging in the administration of this therapy. Acute reactions are not age-mediated but the underlying mechanisms are poorly understood. The most common acute reactions, flush, urticaria, dyspnea and feverish sensation, are most easily prevented by glucocorticoids.

Objectives: To study if a premedication with oral antipyretic agent (paracetamol) and antihistamine (cetirizine) could decrease the frequency of acute infusion reactions.

Methods: All pediatric patients scheduled for infliximab infusions at our hospital were prospectively introduced to oral paracetamol (20 mg/kg) and cetirizine (10 mg) 1h prior to infliximab infusions for one year. Acute adverse events were registered for this time period and retrospectively during the preceding year.

Results: During the study period, infliximab infusions with premedication were given to 64 pediatric patients on immunosuppressants (48 with rheumatic disease and 16 with IBD; mean age 15 years). Infliximab was introduced to 14 of these children; the rest were on maintenance therapy. 12 infusions reactions, 4 mild and 8 severe, were observed in 8/64 (12.5%). In 5/60 (8.3%); p > 0.05. The presentation of an acute infusion reaction was not related to the diagnosis.

Conclusion: Disappointingly, in pediatric patients acute infusion reactions related to infliximab could not be prevented with premedication with oral paracetamol and cetirizine.

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PREDNISONE IN THE FIRST YEAR AFTER DIAGNOSIS OF CROHN DISEASE – PROSPECTIVE EVALUATION OF THE TREATMENT STRATEGY
J. Malý1 *, O. Pozler1, P. Dedek1. 1Dept. of Paediatrics, Charles University Teaching Hospital, Hradec Kralove, Czech Republic
Aims: Evaluation of prednisone cumulative dose and azathioprine steroid-sparing effect in week 52 after diagnosis.

Methods: Indication criteria: age 0–19, Crohn disease (CD), follow-up at least 52 weeks. CD was diagnosed according to Porto criteria. PCDAI was used for monitoring of therapeutic response, calculation was routinely realised at diagnosis, then in week 12, 26, 38, and 52, or at any time when relapse was suspected.

Results: Indication criteria matched 48 patients, aged 5–18 yrs. Mean follow-up was 48 (13–117) months. Systemic corticosteroids (CS) were used in 40 (83%) patients during 52 weeks of follow-up. Median of PCDAI at diagnosis was 30 (5–52.5) points. Thirty-five (87%) patients received prednisone, five (13%) budesonide. Twenty patients received CS in week 52; 11 (69%) of them <0.09 mg/kg/day. Median of prednisone cumulative dose was 70.1 (15.0–159.6) mg/kg/year, that is approximately 0.19 mg/kg/day. Remission was achieved in 35 (87%) patients in week 52. Corticopenedependence was stated in 6 (15%) patients. Cumulative dose of prednisone reached 66.3 mg/kg/year in group of patients treated with azathioprine till the 12th week. This dose was quite different in children who were not treated with azathioprine initially 102.8 mg/kg/year. Nevertheless, this difference was statistically insignificant (p = 0.05).

Conclusion: Cumulative dose of CS during first year after diagnosis didn’t reach levels which are linked to growth impairment. Concomitant azathioprine treatment helps to diminish amount of applied CS and increases the probability of long-term remission.

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HAEMOPHAGOCYCTIC LYMPHOMATOSSITIS IN AN ADOLESCENT WITH CROHN’S DISEASE ON AZATHIOPRINE
1Paediatric Gastroenterology and Hepatology, St James’s University Hospital, Leeds; 2Centre for Paediatric Gastroenterology, Hepatology and Nutrition, Sheffield Children’s Hospital, Sheffield, United Kingdom
Case: A 16-year-old boy diagnosed with Crohn’s disease presented 8 months after starting azathioprine, with fever unresponsive to broad spectrum antibiotics, lymphadenopathy and hepatosplenomegaly. His blood tests revealed pancytopenia, raised bilirubin and liver enzymes, hypoalbuminemia, deranged clotting, low fibrinogen and elevated ferritin levels. His E BV serology was positive and EBV DNA was 42,465 copies/ml. A bone marrow showed increased macrophages with evidence of haemophagocytosis. A diagnosis of haemophagocytic lymphohistiocytosis (HLH) was made and he was treated with etoposide, cyclosporine and dexamethasone (HLH4 protocol) which halted the hyperinflammatory state. His fever settled and bloods normalised.

Discussion: The immunosuppressive therapy may have contributed to the development of this serious complication of EBV infection. HLH is a life threatening condition of severe hyperinflammation. Cardinal sings and symptoms include fever unresponsive to antibiotics, hepatosplenomegaly and pancytopenia. Biochemical markers include elevated triglyceride, ferritin and low fibrinogen. It can be genetic or acquired. Azathioprine is commonly used as maintenance immunosuppressive therapy in patients with inflammatory bowel disease. This unusual case highlights a potentially serious complication that patients on azathioprine therapy may be susceptible to and awareness of this condition is crucial to diagnose this condition early and start life saving treatment.

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LONG-TERM TREATMENT WITH AUTOLOGOUS RED BLOOD CELLS LOADED WITH DEXAMETHASONE 21-PHOSPHATE IN PEDIATRIC PATIENTS AFFECTED BY STEROID-DEPENDENT CROHN DISEASE AND ULCERATIVE COLITIS
B. Papadatou1 *, L. Rossi1, F. Bracci1, D. Knafelz1, C. Noto2, A. Diamanti1, A. Filoni1, M. Rossi 1, F. Ferretti1, M. Magnani 2, M. Castro 1.
1U.O. Gastroenterologia, OSPedale Pediatrico Bambino Gesù, Roma; 2Biochemistry, Università di Urbino, Urbino, Italy

Therapy with steroids can induce resistance, dependency and side effects. We demonstrated that infusions of red blood cells loaded with dexamethasone is safe and efficacious to maintain the remission in Crohn Disease (CD) and Ulcerative Colitis (UC) patients after prolonged therapy. In steroid dependent UC the mean CAI at beginning was 6.6 and at 20 months 0. No side effects have been observed in both groups of pts. RBC Dex 21P infusions is a safe therapy protocol which halted the hyperinflammatory state. His fever settled and bloods normalised.

Discussion: The immunosuppressive therapy may have contributed to the development of this serious complication of EBV infection. HLH is a life threatening condition of severe hyperinflammation. Cardinal sings and symptoms include fever unresponsive to antibiotics, hepatosplenomegaly and pancytopenia. Biochemical markers include elevated triglyceride, ferritin and low fibrinogen. It can be genetic or acquired. Azathioprine is commonly used as maintenance immunosuppressive therapy in patients with inflammatory bowel disease. This unusual case highlights a potentially serious complication that patients on azathioprine therapy may be susceptible to and awareness of this condition is crucial to diagnose this condition early and start life saving treatment.

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NEW MEANS TO MONITOR THE EFFECT OF GLUCOCORTICOID THERAPY IN CHILDREN
H. Rintamäki1 *, H. M. Salo2, O. Vaaraala2, K. Kolho1. 1Hospital for Children and Adolescents, University of Helsinki; 2Viral Diseases and Immunology, National Public Health Institute, Helsinki, Finland
Background: The effects of glucocorticoid therapy (GC) on immune cells are incompletely understood.

Methods: We developed a novel assay, in which the effect of patient’s serum on donor’s blood derived mononuclear cells was studied by measuring a panel