a left lower brachial plexus lesion (C8/T1) and bilateral ulna entrapment neuropathies at the elbows, the latter possibly secondary to her elbow synovitis. She received IA steroid injections and her maintenance therapy was changed from MTX to AZA.

Results: Case A made a good albeit incomplete neurological recovery. To date she has not had any other major organ involvement. Case B improved markedly with treatment with pyridostigmine. Case C has not developed any other major organ involvement. Her nerve conduction studies have normalized.

Conclusion: These neurological presentations are recognized in the adult population but are rare in this age group. There is a limited evidence base to support treatment decisions in these young people and therefore need to be made on an individual basis.

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ABSTRACT 44  BSPAR153

DRAMATIC RESPONSE OF CACHEXIA TO ANTI-TNF THERAPY IN JUVENILE IDIOPATHIC ARTHRITIS

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Introduction: We present the case of a 14-year-old girl presenting with dramatic weight loss.

Aims: She was fatigued but denied other symptoms including joint pain and abnormal eating behaviour. Raised ESR, mild anaemia, positive ANA and RF were identified. Examination revealed a florid, widespread, symmetrical polyarthritis and a diagnosis of rheumatoid factor positive polyarticular JIA was made.

Method: She was managed with piroxicam, multiple IA steroid injections and s.c. MTX. Subsequently SSZ was added. Several months after diagnosis her arthritis had improved, and her weight loss stabilized, though she remained below the 0.4th centile. A further flare in arthritis precipitated further weight loss. 18 months after diagnosis she was admitted for re-feeding with nasogastric feeds. She had a persistent widespread polyarthritis. Further investigation revealed no alternative diagnosis. She was treated with pulse methylprednisolone, followed by oral prednisolone 1 mg/kg/day and was commenced on Intlimab.

Results: Over the next 6 months her weight gain was dramatic. She achieved a BMI within the normal range and as the arthritis was better controlled, her prednisolone was weaned to 5 mg daily.

Conclusion: Dramatic weight loss in adolescence opens a wide differential diagnosis and requires thorough assessment both in terms of medical conditions and eating behaviour. Rheumatoid cachexia in adults with RA is recognized, though the evidence that it is responsive to anti-TNF therapy is controversial. We postulate that it may also be a complication of JIA during adolescence. In our case anti-TNF therapy was effective in the management of the cachexia.

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ABSTRACT 45  BSPAR154

CRICOARYTENOID ARTHRITIS: A RARE PRESENTATION OF SYSTEMIC JIA

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Introduction: A 17-month-old boy of white British origin presented with a 3-week history of recurrent daily fevers, a macular evanescent pink rash and reduced oral intake.

Aims: There was a history of similar symptoms at 11 months previous but without referral to secondary care. Following admission it was noted than when febrile he was reluctant to move but no definite synovitis was noted. He was treated with regular ibuprofen. Investigations included bone marrow aspirate (reactive changes only), normal abdominal US and urinary catholamines

Method: Within 24 h of general anaesthesia he developed symptoms and signs of significant upper airways obstruction. He required emergency treatment with nebulized budesonide and oral dexamethasone with good immediate effect but quickly developed recurrence of his symptoms. Laryngotracheal bronchoscopy showed structurally normal fixed vocal cords bilaterally, with no movements at the cricoarytenoid joints consistent with arthritis of these joints. He was also noted now to have synovitis of the right wrist and ankle.

Results: Systemic JIA was diagnosed and he responded to methylprednisolone (30 mg/kg/day) followed by maintenance oral steroids and both his stridor and upper airway obstruction improved.

Conclusion: Cricoarytenoid arthritis (CA) is a rare complication of JIA but has not been described in children with the systemic subtype. CA can present as croup, and can be life threatening. With appropriate history and examination recognition, of the cause and prompt administration of steroids as seen in this case can avoid severe airway obstruction and tracheostomy.

Disclosure statement: The authors have declared no conflicts of interest.

ABSTRACT 46  BSPAR155

PURIFIED IGG FROM PATIENTS WITH JUVENILE AND ADULT ONSET SLE ENHANCES APOPTOSIS IN NEONATAL RAT CARDIOMYOCYOTES EXPOSED TO MYOCARDIAL I/R INJURY

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Introduction: A significant amount of damage during a myocardial infarction (MI) occurs during the reperfusion stage which is known as ischaemic reperfusion (I/R) injury. SLE can occur in both adolescents (JSLE) and adults (SLE) and is a condition associated with a high burden of cardiovascular morbidity and mortality. Patients with JSLE and SLE have circulating autoantibodies which have been linked to an increased risk of suffering an MI. Previous studies have shown accelerated mesenteric I/R injury in a lupus mouse model, however, to date there has been no research focusing on the heart.

Method: Polyclonal IgG was isolated from serum of patients with JSLE (n = 10), SLE (n = 10) and healthy controls (n = 11). Endotoxin was removed to a level below 0.225 endotoxin U/ml cardiomyocytes were isolated from 1- to 2-day-old rats and were treated with 500 μg/ml polyclonal IgG from each group and the following day exposed to simulated I/R injury. Apoptosis was measured by assessment of caspase-3 cleavage using immunoblot.

Results: In the presence of IgG from patients with both JSLE and SLE caspase-3 cleavage was significantly increased in comparison to baseline cells and cells treated with healthy IgG. The effect observed with IgG from JSLE patients although higher than that of SLE was not statistically significant.

Conclusion: In this in vitro simulated I/R injury model IgG purified from patients with JSLE and SLE enhanced I/R injury as assessed by caspase-3 cleavage. This novel pathogenic role of these antibodies will now be tested in vivo to validate this finding and explore potential mechanisms of action.

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ABSTRACT 47  BSPAR156

SAFE TOLERANCE RATE OF DISODIUM PAMIDRONATE INFUSION IN CHILDREN

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Introduction: Bisphosphonates are used to prevent bone fractures and treat bone pain in children with severe osteoporosis as infusions