

examination is still rarely being documented across Yorkshire, across disciplines, by doctors at all levels, even when there are clear triggers and red flags for the examination.

We propose a change in the admission documentation regionally to include a specific MSK section for acute admissions.

We plan educational events in the region to improve knowledge of MSK examination.

We plan to re-audit in the region, following the introduction of this intervention.

We propose a national audit should be performed. then more educational measures, directed at all levels of doctors should be driven forward, on a national level, to ensure that this picture improves.

## REFERENCES

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## G230 THE USE OF COMPOSITE SCORES FOR THE ASSESSMENT OF JUVENILE IDIOPATHIC ARTHRITIS (JIA) IN A ROUTINE OUTPATIENT CLINICAL SETTING

doi:10.1136/archdischild-2013-304107.242

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Several JIA composite scores have been validated for use in clinical research studies, but the practicality of their use in the routine clinical setting is unclear. Our aim was to determine the completion rate of the 6 item composite disease activity score, the American College of Rheumatology core outcome variables (ACR COV), and to calculate the 4 item composite Juvenile Arthritis Disease Activity Score (JADAS) in a tertiary rheumatology unit outpatient clinic setting.

**Methods** In this single centre clinical service evaluation, a retrospective case note review of 105 consecutive JIA patients attending outpatient follow up clinics in 2011–12 was undertaken. The completion rate of a standardised ACR COV proforma (present in all case notes) was determined, and JADAS was calculated from additional clinical data. Pearson's correlation and logistic regression were used to assess the impact of individual items on changes in JADAS.

**Results** 105 children with JIA had 193 clinic visits but complete ACR COV data were found in only 68/193 records (35%). Of the 6 items comprising the ACR COV, the ESR accounted for the majority of missing data. Sufficient data was available to calculate JADAS scores in 22 children with two consecutive outpatient visits. The table indicates that changes in JADAS were most dependent on the physician's global assessment, and least dependent on ESR (Pearson correlation). Stepwise regression showed that the physician's global assessment alone predicted 87.5% of JADAS change and the ESR contributed an additional 3.3%.

### Abstract G230 Table 1

	Pearson correlation	Stepwise regression	
	Change in JADAS		Change in JADAS
Physician global assessment	0.93	Physician global assessment	87.5
Active joints	0.84	ESR	90.8
Patient global assessment	0.73	Patient global assessment	97.1
ESR	0.64	Active joints	98.8

**Conclusion** In a routine clinical setting, frequent missing data reduced the potential clinical utility of the ACR COV and JADAS composite scores. We speculate that a composite clinical score which does not rely on recording the ESR may improve completion rates without diminishing clinical utility.

## G231 MORTALITY PATTERNS IN CHILDREN WITH JUVENILE DERMATOMYOSITIS: TWO DECADES OF EXPERIENCE FROM A SINGLE TERTIARY CARE CENTRE

doi:10.1136/archdischild-2013-304107.243

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**Introduction** Juvenile dermatomyositis (JDM), is a chronic inflammatory disease characterised by proximal muscle weakness and pathognomonic rash. Although there have been significant advances in management of JDM, the condition still has significant morbidity and mortality associated with it. Complications like breakthrough infections, gastrointestinal tract vasculitis, interstitial pneumonitis and myocarditis pose significant challenges to treating physicians. We report our experience of mortality patterns in this condition over the last 2 decades. There is paucity of literature on this aspect of JDM.

**Patients and methods** Case files of 72 patients diagnosed to have JDM at a single centre during the period January 1993–November 2012 were reviewed. The total follow-up amounts to 256 patient years. The diagnosis of JDM was based on Bohan and Peter criteria. Standard treatment protocols (based on glucocorticoids and methotrexate) were used in management and the senior author was involved in the care of all these children. We recorded 7 deaths amongst these patients over the last 2 decades.

**Results** Amongst the 7 children who died, there were 5 boys and 2 girls. The mean age at diagnosis was 10.2 years (range 7–12 years) and duration of treatment ranged from 1 month to 9 years. The causes of death included: upper gastrointestinal vasculitis (3 patients) – of the latter, 1 had perforation peritonitis and 1 had massive upper gastrointestinal bleeding leading to sudden death even before medical aid could be provided; interstitial lung disease with secondary infection (2 patients); bronchiolitis obliterans with organising pneumonia and pneumothorax (1 patient); progressive muscle disease with cardiomyopathy refractory to immunosuppressive therapy (1 patient) – this child died after 9 years of follow-up. Intercurrent and breakthrough infections were recorded amongst 5 of these 7 children.

**Conclusion** JDM is associated with significant mortality – 13.8% at our centre over the last 2 decades. Gastrointestinal and pulmonary involvement remain the most common causes of death in this condition. Infections are also an important contributory cause. In our experience, delays in diagnosis and referral contribute significantly to mortality in this condition.

## G232 USE OF INFLIXIMAB IN CHILDREN WITH REFRACTORY KAWASAKI DISEASE

doi:10.1136/archdischild-2013-304107.244

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**Introduction** The aetiology of Kawasaki disease (KD) is still an enigma. It is known that cytokines have a major role to play in the pathogenesis of this condition. There is evidence of TNF- $\alpha$