Foot Orthoses in children with Juvenile Idiopathic Arthritis – a randomised controlled Trial
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Background:
There is limited evidence supporting the podiatric treatment of children with juvenile idiopathic arthritis (JIA). This multicentre randomised controlled trial aimed to determine whether pre-formed foot orthoses (FOs) impacted on pain and quality of life (QoL) in children with JIA.

Methods
Eligible children were randomised to receive either “fitted” FOs with customised chair-side corrections or “control” FOs made without corrections. Changes in pain and QoL were measured using a visual analogue scale (VAS) and PedsQL questionnaire respectively. JIA children were assessed at baseline, 3 months and 6 months.

Results
Sixty children were recruited. One-hundred and seventy-nine out of a possible one-hundred and eighty assessments [99.4%] were completed. A statistically significant greater difference in pain reduction (baseline – 6 months) was seen between the two groups favouring fitted FOs (p = 0.029). The reduction in pain in the fitted FOs group was clinically important (8mm). Significant differences in QoL favouring fitted FOs were also identified as measured by the children and independently by their parents/carers.

Conclusions
Fitted FOs may reduce pain and improve quality of life in selected children with JIA.