



ORAL PRESENTATION

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Safety and efficacy of ultrasound guided corticosteroid injections into temporomandibular joints in children with active juvenile idiopathic arthritis

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Background

Prevalence of temporomandibular arthritis in JIA varies widely, reported rates ranging from 17- 87%. Untreated inflammation with joint destruction can lead to asymmetrical mandibular growth with jaw deviation, dental malocclusion and micrognathia. Intra-articular steroid injection for TMJ arthritis has been found to be effective. There are limited reports on the efficacy of ultrasound guided steroid injections of the TMJ's in JIA.

Aim

To assess the safety and efficacy of ultrasound guided corticosteroid injection, done by a paediatric rheumatologist, into the temporomandibular joints in children with JIA.

Methods

Children with JIA presenting to rheumatology clinic assessed for TMJ arthritis. Triamcinolone hexacetonide injected in those with active arthritis assessed by MRI, using ultrasound guidance under general anaesthesia by a single paediatric rheumatologist trained in procedure. Efficacy and safety was assessed post-injection by patient guided symptoms and physical examination.

Results

38 children (34 girls) with TMJ injection between Jan 2009–Jan 2011 studied. Mean age: 12.25 ± 3.55 years (range=5-18 years). Mean disease duration: 4.54 ± 2.73 years (1.5-11.1years). Symptoms pre-injection: pain:17/38(44.7%), jaw deviation:14/38(36.8%), restricted jaw movement:13/38(34.2%), chewing dysfunction:7/38 (18.4%), micrognathia:5(12.5%). Total 63 joints injected. Injection efficacious:58/63(92.06%) joints(Table 1). Stiffness was persistent in 2 children with both TMJ's injected & 1 had persistent jaw deviation. Injection site scar in 1 child.

Conclusions

Ultrasound guided corticosteroid injection into the temporomandibular joint done by a paediatric rheumatologist trained in the procedure safe with a high rate of success.

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Table 1 Improvement in symptoms

Symptom	Improvement [n (%)]
Pain (17)	17 (100%)
Jaw deviation (14)	13 (92.8%)
Chewing dysfunction(7)	5 (71.4%)