Primer on Temporomandibular Joint (TMJ) Arthritis in Children with Juvenile Idiopathic Arthritis (JIA)

Quick Facts:
1. TMJ arthritis is one of the most commonly affected joints in children with JIA, ranging from 2/3rds to 3/4ths of patients. It is often present at the initial JIA diagnosis visit (1, 2).
2. TMJ arthritis is present in ALL subtypes of JIA (3).
3. TMJ arthritis is frequently asymptomatic and needs to be screened by MRI imaging to diagnose (4).
4. MRI is the most sensitive method for detecting TMJ arthritis in children with JIA (1, 2). It is also very specific (rarely is falsely positive) (5).
5. TMJ arthritis leads to bony destruction, including the growth plate, leading to small jaws/micrognathia (see CT scan above) (4).
6. TMJ arthritis can lead to lifelong pain, disability (mouth opening), dysfunction (chewing), and facial dysmorphism. Indeed, up to 57% of adults who had arthritis as children have craniofacial growth abnormalities examined several decades later in life (6).
7. TMJ arthritis may not respond to aggressive systemic therapy (e.g., methotrexate plus a TNF inhibitor) (7). Fortunately, intraarticular corticosteroid (triamcinalone hexacetonide, Aristospan) injections have proven to be highly efficacious by several groups worldwide (7).
8. Early detection by MRI screening allows for early treatment to help prevent TMJ damage (7).

References:

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