Jaw Disorder, Condylar Damage Common in JIA

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VERSAILLES, FRANCE — A surprisingly large proportion of children with juvenile idiopathic arthritis show clinical signs of temporomandibular joint arthritis and condylar damage, according to Belgian researchers who conducted thorough rheumatologic and dentofacial evaluations of 100 patients.

More than half, 55%, of the children had one or more signs of temporomandibular joint arthritis (TMJA). Eighty percent had condylar damage. The effects were seen across all subtypes of juvenile idiopathic arthritis (JIA).

An D. Billiau, M.D., and her colleagues at University Hospitals in Leuven reported their findings in a poster at the 12th European Pediatric Rheumatology Congress. Rheumatologists and orthodontists collaborated on the study, the findings of which indicate that clinical follow-up of every JIA patient should include "regular evaluation by an experienced orthodontist."

The damage was more than what the team had expected, senior investigator Corinne Wouters, M.D., Ph.D., noted in an interview.

"Not enough" is being done to screen these children for TMJA, added Dr. Billiau, when asked whether rheumatologists check for TMJA after JIA diagnosis. Even when screening does occur, there is no agreement on how to detect early-stage TMJA.

The prevalence of TMJA in the JIA population is around 33%-67%, and the jaw disorder is associated with some, but not all, JIA subtypes, according to the medical literature, according to the investigators.

The study enrolled children from November 2003 to November 2004 in an outpatient clinic at University Hospital Gasthuisberg in Leuven. Girls outnumbered boys by nearly 2:1. The median age was 10.5 years, and upon first examination patients had a median disease duration of 3 years. Two-thirds of the population had active disease.

All patients underwent clinical rheumatologic examination and dentofacial evaluation. Forty-six patients consented to radiologic examinations, including, where feasible, a panoramic x-ray called an orthopantomogram and a lateral cephalogram. In 32 cases, the records were matched with those of healthy children who came to the clinic for minor orthodontic problems.

The most common clinical sign of TMJ arthritis was reported as reduced mouth opening in 28% of patients. This occurred more often in children with severe, active, or long-standing disease, but did not appear to differ among JIA subtypes.

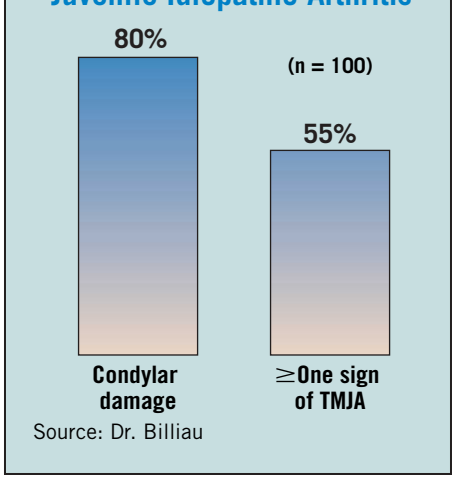
Otherwise, the investigators reported that the signs and symptoms of TMJ arthritis as well as condylar lesions bore no relationship to disease characteristics such as duration, severity, activity, or subtype. "TMJ involvement and condylar damage can occur in every child with JIA, irrespective of JIA subtype," they warned.

Compared with healthy children and children with minor orthodontic problems, they added that the JIA patients were found to have "a profoundly altered dentofacial profile."

Yet routine orthodontic examination may not be sensitive enough to detect TMJ damage in the absence of clinical symptoms, according to Dr. Billiau's group. Warning of the aggressive course of TMJA, the investigators concluded that imaging would be needed for early diagnosis.

The next phase of the ongoing study is to determine the best imaging technique for diagnosing TMJA in children with JIA. Issues under consideration include sensitivity, feasibility, and safety, Dr. Wouters said. ■

Condylar Damage, TMJA in Children With Juvenile Idiopathic Arthritis



Source: Dr. Billiau