Background: The ankle is one of the most commonly affected sites in juvenile idiopathic arthritis (JIA). This region has a complex anatomical structure owing to the presence of multiple joint recesses and surrounding tendons. While the prognostic value of ultrasound (US)-detected arthritis has been investigated in recent studies, the role of tenosynovitis in JIA remains still unexplored.

Objectives: To investigate: 1) US features of ankle involvement in JIA at disease onset; 2) the predictive value of US-detected tenosynovitis in ankles with clinically active disease of children with new-onset JIA.

Methods: The clinical charts of all consecutive patients with new-onset JIA between May 2018 and January 2020 at study centres (Polliclinico and G.Pini Hospitals of Milan) and with clinically active ankle disease among the joints affected were reviewed retrospectively. Data on ankle US assessment were retrieved and patients were then stratified as follows: 1) patients with detection on US of isolated arthritis in at least one of the joint recesses of the ankle region; 2) patients with detection on US of tenosynovitis in at least one of the tendon compartments of the ankle irrespective of the presence of concomitant arthritis. For each of these two categories, estimation of patients who were able to achieve clinical disease remission at 12 months since disease onset was evaluated.

Results: Twenty-seven new-onset JIA patients were found to have clinical involvement of the ankle among the joints affected. Nine of them (33.3%) showed on US isolated arthritis of the ankle, whereas US-detected tenosynovitis was found in 18 (66.7%) patients. The amount of patients who were able to achieve disease remission at 12-months was the same (66.7%) for both patients with and without US-detected tenosynovitis in the ankle (12/18 and 6/9 patients, respectively). In patients with US-detected tenosynovitis and clinical disease remission at 12 months, the lateral tendon compartment (LTC) had the tendon site more frequently affected by pathology (75.0%). Patients with US-detected tenosynovitis that did not achieve clinical disease remission at follow-up had the highest frequency of tendon pathology on US in the medial tendon compartment (MTC) (83.3%). The anterior tendon compartment was the less frequently affected tendon compartment of the ankle in all patients (33.3% in both patients with and without clinical remission of disease at the 12-months follow-up visit).

Conclusion: US-detected tenosynovitis of the ankle is a common finding in patients with new-onset JIA with clinically active ankle activity and is more frequent than the detection on US of isolated arthritis. The MTC and LTC are the tendon compartments more commonly affected on US. The detection on US of tenosynovitis at disease onset in ankles with clinical disease activity did not seem to affect the change to achieve the overall clinical disease remission compared to patients without tendon pathology but with joint disease in the ankle region.

Disclosure of Interests: None declared

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**Objectives:**

- To estimate the prevalence of underweight, overweight and obesity in children and adolescents with JIA compared to the general population.
- To determine the association between weight status and patients' clinical and self-reported outcomes.

**Results:**

- The prevalence of overweight and obesity was observed in children with JIA, with higher rates of overweight being observed in adolescents than in affected children.
- Younger age, higher disease activity, more frequent physical activity and increased number of comorbidities were independently associated with a lower likelihood of being overweight/obese.

**Conclusion:**

The overall prevalence of underweight, overweight and obesity in children and adolescents with JIA is comparable to that found in the general population. Behavioural health promotion, including regular physical activity, as part of the treatment strategy in JIA should preventively already begin at preschool age and necessarily be made accessible to patients of all educational levels.

**REFERENCES:**


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**ID Sex JIA onsets, y Repeated MAS Initial Experience of increased CAN doses Outcomes Current treatment**

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**Footnotes:**


**Conclusion:**

Canakinumab is an effective rescue treatment either soJIA or JIA. Patients with MAS and developed on CAN required the temporal increasing of the doses.

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