

Ankylosing tarsitis associated with psoriatic arthritis

Tarsitis or arthritis of the mid foot is well recognised in juvenile idiopathic arthritis. However, ankylosing tarsitis is a rare complication from refractory arthritis seen in some children with enthesitis-related arthritis. We present a case of ankylosing tarsitis in a pediatric HLA-B27-negative psoriatic arthritis patient. Ankylosing tarsitis is not well recognised in the pediatric psoriatic arthritis population.

KEYWORDS: ankylosing tarsitis ■ HLA-B27 ■ juvenile idiopathic arthritis ■ psoriatic arthritis

A 15-year-old boy with psoriatic arthritis diagnosed by the Vancouver criteria at the age of 5 years presented with polyarticular disease and developed persistent right foot pain, which followed features of a younger subgroup of patients with psoriatic arthritis as reported by

Stoll *et al.* [1]. He is HLA-B27 negative and complained of pain and reduced range of movement in his right subtalar and right midfoot. Radiographic imaging showed fusion of the anterior calcaneum, navicular and cuboid bones, confirming suspicion of tarsal coalition (FIGURES 1 & 2).

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Figure 1. x-ray anteroposterior view and lateral view, arrows show fusion of anterior calcaneum, navicular and cuboid bones.



Figure 2. T1 and short T1 inversion recovery sagittal sequence of the right foot. Arrows show fusion of anterior calcaneum, navicular and cuboid bones.

Clinical features were midfoot swelling, swelling around the malleoli, Achilles tendon and plantar region of the feet, with decreased mobility of tarsal, ankle and metatarsophalangeal joints. Anti-inflammatory medications, physiotherapy, shoe insoles and etanercept were instituted as therapy.

Tarsitis has a variety of radiologic features, which include osteopenia of the tarsal bones at the beginning, with the progression to erosions, osseous proliferation at entheses, bone cysts, joint space narrowing and finally ankylosis [2].

Ankylosing tarsitis represents a set of clinical and radiological manifestations originally described in patients with HLA-B27-positive juvenile spondyloarthritis, and include inflammation from the ankle to the metatarsophalangeal joints [3].

Future perspective

Ankylosing tarsitis is a rare feature of juvenile spondyloarthropathy. It is possible that some individuals are genetically predisposed to mid-foot involvement. Identifying clinical subgroups with midfoot involvement and potential disease mechanisms will be important in early appropriate therapy for this condition. Better imaging and early appropriate therapy might help prevent ankylosis in the future when there is midfoot involvement.

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Informed consent disclosure

The authors state that they have obtained verbal and written informed consent from the patient/patients for the inclusion of their medical and treatment history within this case report.

Executive summary

- Ankylosing tarsitis can be associated with juvenile psoriatic arthritis.
- It presented in our patient many years after his first diagnosis of juvenile psoriatic arthritis.
- Clinical suspicion and radiological confirmation is the key to the right diagnosis.

References

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