Symptomatic Cuboid Navicular Coalition

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INTRODUCTION:

Tarsal coalition is a rare condition, affecting around 1% of the population. Talocalcaneal and calcaneonavicular coalition accounts for over 90% of cases. A cuboid-navicular coalition is extremely rare, with fewer than 10 cases reported. Patients with tarsal coalition are typically asymptomatic, but symptoms may emerge during adolescence as the coalition becomes more ossified. Current research suggests that cuboid-navicular coalitions are typically asymptomatic, with pain present only during specific moments of activity or exercise. We report the case of a young man with short history of midfoot pain following exertion.

REPORT:

A 38-year-old man presented with midfoot pain for the past three months, which started after a game of badminton. The pain subsided after a steroid injection but recurred two months later, after badminton, and was persistent. It worsened with prolonged walking. He had tenderness over the proximal and middle parts of plantar fascia, arch slightly lowered and tight gastrocnemius. Xray noted mild PCFD with spurs over talus and first metatarsal bone. He was diagnosed as plantar fasciitis with equinus, and started on self stretching and physiotherapy.

As pain was persistent three weeks later, MRI was done and showed focal thickening of plantar fascia with possible tear and narrowing of cuboid-navicular joint with marrow edema, suggestive of a coalition. A trial of physiotherapy was given and steroid injected was done over plantar fascia two months later. At time of report, there was improvement in pain. He is planned for diagnostic ultrasound-guided injection or surgery if pain is persistent.



Figure 1: Cuboid-Navicular coalition in oblique foot x-ray



Figure 2: Narrowed navicular-cuboid joint with marrow edema (coronal-cut MRI)



Figure 3: Cuboidnavicular coalition (axial cut MRI)

CONCLUSION:

In summary, we present a rare case of cuboidnavicular coalition. A high index of suspicion has to be maintained in cases of midfoot pain, especially if patient has a superimposed second pathology like plantar fasciitis.

REFERENCES:

1.Awan et al. The rare cuboid-avuncular coalition presenting as chronic foot pain. Case Rep Radiol. 2015;2015:625285.