SPR MSK Unknowns 2016

Pediatric MSK Cases

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Seattle Children’s
No Disclosures
Case 1
Case 1: 15 yr old boy with ankle pain
Case 1: 15 yr old boy with ankle pain

Patient

Same age control
Case 1: 15 yr old boy with ankle pain

Patient

Same age control
ACCESSORY ANTEROLATERAL TALAR FACET AS AN ETIOLOGY OF PAINFUL TALOCALCANEAL IMPINGEMENT IN THE RIGID FLATFOOT: A NEW DIAGNOSIS

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ABSTRACT

A retrospective review identified six patients with seven painful rigid flatfeet. In each case, pain was localized laterally to an accessory facet of the anterolateral talus. Cross-sectional imaging demonstrated no evidence of tarsal coalition. In five of the six, preoperative magnetic resonance imaging (MRI) was obtained and in each case demonstrated focal abutting bone marrow edema consistent with impingement between the accessory facet and the anterior calcaneus.

Seven feet in six patients underwent resection of the accessory facet with additional subtalar joint-sparing reconstructive procedures. At an average follow-up of 11 months, clinical results were graded as four good and two fair.

An association between this accessory facet and pain in the rigid flatfoot has not been previously midfoot callosities may be present due to prominence of the talar head or navicular.

Radiographs and computed tomography (CT) with coronal and sagittal reconstructions are useful to identify tarsal coalitions, the most common etiology of the rigid flatfoot in adolescents and young adults. Computed tomography or magnetic resonance imaging may assist in detecting incomplete coalitions (cartilaginous or fibrous). Other established etiologies of the rigid flatfoot include infectious, inflammatory, or degenerative arthritides, neoplastic or neurologic processes, and osteochondral fractures. Laboratory studies or radionuclide imaging may help in making diagnoses such as osteoid osteoma or inflammatory arthritides.

Most patients with a symptomatic, rigid flatfoot will have an identifiable causation. However, there are several reports of idiopathic rigid flatfoot in the literature. These authors have reported that the idiopathic rigid
Accessory Anterolateral Talar Facet

Figure 3. Clinical example. Figure 3a. (left) Lateral radiograph of accessory anterolateral talar facet (F – accessory facet, B – dorsal talar beak). Figure 3b. (right) CT scan (F – accessory facet, B – dorsal talar beak).

Figure 5. Histologic evaluation of excised accessory facet with hematoxylin and eosin (A – normal hyaline cartilage, B – early fibrocartilaginous change, C – thin, fissured cartilage, D – thickened subchondral bone with cysts).

that within the resected facet, there were regions of normal hyaline cartilage intermixed with areas of thin, fissured cartilage, early fibrocartilaginous changes, and thickened subchondral bone with microscopic cyst formation (Figure 5). Continuity between the articular surface of the posterior facet of the talus and the accessory facet was noted both on MR and clinically at the time of surgery. No tarsal coalitions (osseous or fibrous) were observed.

All six patients underwent resection of the accessory facet; one bilaterally. One was treated with isolated
Case 2
Case 2: 11 yr old boy with elbow pain and remote history of supracondylar fracture
Case 2: 11 yr old boy with elbow pain and remote history of supracondylar fracture
Fishtail deformity — a delayed complication of distal humeral fractures in children

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Abstract
Background Concavity in the central portion of the distal humerus is referred to as fishtail deformity. This entity is a rare complication of distal humeral fractures in children.
Objective The purpose of this study is to describe imaging features of post-traumatic fishtail deformity and discuss the conclusion. Fishtail deformity of the distal humerus is a rare complication of distal humeral fractures in children. This entity is infrequently reported in the radiology literature. Awareness of the classic imaging features can result in earlier diagnosis and appropriate treatment.
Fig. 5 Patient No. 7, an 11-year-old boy with pain and stiffness after supracondylar fracture at age 5. a Oblique radiograph shows fishtail deformity (arrow). b Coronal MR multiplanar gradient recalled acquisition in the steady state shows subchondral cysts in the capitellum (thin arrow) and concavity in the lateral trochlea (thick arrow). c Sagittal T2-W fat-saturated MR image shows hyperintense synovial inflammation (asterisks) and subluxation of the radial head (arrow).
Fig. 6 Dorsal view of cadaver elbow after dye injection into brachial artery shows relative watershed area centrally at the site of the lateral trochlea (arrows). Reprinted with permission [14]
Case 3: 14 yr old boy with elbow injury
Case 3: 14 yr old boy with elbow injury
Case 3: 14 yr old boy with elbow injury
References


Thank You (thapamd@uw.edu)