Subpubic cyst

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Diagnosis

Subpubic degenerative cyst arising from the fibrocartilage of the pubic symphysis.

Discussion

The entity of a mass at the pubic symphysis representing a cartilaginous cyst was first described 15 years ago with emphasis on the microscopic appearance [1]. The term “cartilaginous” as associated with this lesion was introduced at that time based on the microscopic appearance, and the term has been perpetuated on all subsequent descriptions of this entity. We have, for this report, replaced “cartilaginous” with “degenerative.” No cross-sectional imaging accompanied that case, and the authors speculated from the microscopic appearance that the lesion was arising from the arcuate ligament, which had undergone cystic

degeneration. Subsequent MRI and CT case reports illustrated the abnormality, including a prominent gas-filled cyst [2]. Most of these reported cases were in multiparous, postmenopausal women with the cyst presenting as a vulvar mass [3–5].

Our patient had a CT scan of the pelvis for problems related to micturition and a subsequent MRI. The mass was interpreted as a subpubic degenerative-type cyst arising from the fibrocartilage of the pubic symphysis with an air-filled cleft communicating with the mass. The mass was surgically removed due to its suspected cause for the patient’s symptoms. Histologically the mass showed acellular material and red blood cells and fragments of cyst wall with paucicellular fibrous tissue, and at higher magnification, the cyst wall transitioned to acellular material. The histological findings were those of a cartilaginous cyst.

The lesion has been described as rare and this would appear to be so. On personal review of 5,000 consecutive pelvis CT scans performed prior to the index case and 5,000 consecutive pelvis CT scans performed after this case, only one similar lesion was found in a 78-year-old male with bladder cancer, making for a prevalence of 0.02% (Not shown).

The rarity of the finding probably accounts for interpretive uncertainty. If imaging shows that the mass is separate from bone and intimately related to the pubic symphysis, a diagnosis of a subpubic cyst could be rendered, which may or may not show a vacuum phenomenon communicating with the pubic fibrocartilage. If the diagnosis is uncertain, CT-guided contrast injection into the cyst has been suggested to demonstrate its communication with the joint to prove its benign nature, particularly in a large lesion that may be mistaken for a sarcoma [6].

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