Symphysys pubis cyst

A 41-year-old man with known pilonidal cyst presented with recurring perianal abscesses and was scheduled for MRI to confirm or rule out internal fistula. In 2009 our patient underwent an operation of his perianal abscess. Following the operation he developed a perianal fistula and another operation was performed.

Imaging Findings:

MRI was performed at 1.5 Tesla scanner (Philips Medical System) using a cardiac coil. MRI revealed a single well defined round heterogeneous lesion which seemed to be very closely related to the symphysis pubis. The lesion was measured to be around 12 mm. It was hypointense in T1-weighted images (Fig. 1) and hyperintense in T2-weighted images (Fig. 2 and 3). In STIR sequence it showed a high signal intensity without any fat suppression (Fig. 4).

Our patient did not wish to receive any intravenous contrast media.

In all the other cases where intravenous contrast media were administrated, they observed a thin peripheral contrast enhancement of the wall of the lesion. The diagnosis of a pubic symphysis cyst was made.

Discussion:

The pubic symphysis is a non-synovial, amphiarthrodial joint connecting the two pubic bones. It is a very dynamic joint that undergoes several changes throughout an individual’s life, particularly during pregnancy and when giving birth.

Only few cases of symphysis cysts have been described in the literature. To our knowledge all were women except in one case [1]. The women were all over the age of 50 and the majority of the women were multipara. Patients went to the doctor with different symptoms such as swelling of the vulva, difficulty voiding, groin pain to dyspareunia. In very few cases the discovery of symphysis cyst was an incidental finding, occurring during ultrasound, CT and MRI.

A symphysis cyst was first described in 1994 [3]. It is presumably of degenerative type, since the majority of the patients in the literature had degenerative changes with subchondral sclerosing and marginal spur formation of the symphysis joint [1, 4-7].

The symphysis pubis cyst has a similar aspect in MRI, hypointense in T1-weighted images (Fig. 1) and hyperintense in T2-weighted images (Fig. 2, 3). Following intravenous administration of gadolinium, there was a thin peripheral
contrast enhancement of the cyst wall [1, 4-9].

To clarify the content of the cyst, some studies took a biopsy from the cyst which showed a content similar to fibrocartilaginous cysts [2, 4, 7, 8]. In one study they injected CT-guided iodinated contrast directly into the cyst [8] and also came to the same conclusion as the others that it is a cyst of degenerative origin.

Some of the patients elected to have the cyst excised, while others opted to wait for confirmation through imaging. The follow-up MRI which was done between 6 months and 2 years showed no further growth of the cyst [1, 4, 6].

It should be noted that benign and malign tumours are a rare occurrence in the symphysis. Degenerative change can result in cyst formation. However, as only few cases were described in the literature prior to this case, it is difficult to draw any conclusions. It is important for the radiologist to be aware of the possible existence of such a cyst in patients. It can be very difficult to make the diagnosis just by looking at the symptoms and usually imaging of the patient is required. MRI and CT are good tools to determine the cyst and its contents.

**Differential Diagnosis List:** Symphysis pubis cyst, Lipomas, Bartholin's cyst

**Final Diagnosis:** Symphysis pubis cyst

**References:**


Description: A 41-year-old man with known perianal abscesses. Axial T1-weighted MRI through the pubic symphysis showing a small round hypointense mass related to the symphysis pubis. Origin: Department of Diagnostic Radiology, Herlev University Hospital, Copenhagen, Denmark
Figure 2

Description: Sagital T2-weighted MRI showing a well defined round hyperintense mass. Origin: Department of Diagnostic Radiology, Herlev University Hospital, Copenhagen, Denmark
Figure 3

Description: Axial T2-weighted MRI showing a well defined round hyperintense mass. Origin: Department of Diagnostic Radiology, Herlev University Hospital, Copenhagen, Denmark
Figure 4

Description: An axial STIR sequence showed a high signal intensity of the cyst without any fat suppression. Origin: Department of Diagnostic Radiology, Herlev University Hospital, Copenhagen, Denmark