Intra-articular tenosynovial giant cell tumor arising from the posterior cruciate ligament

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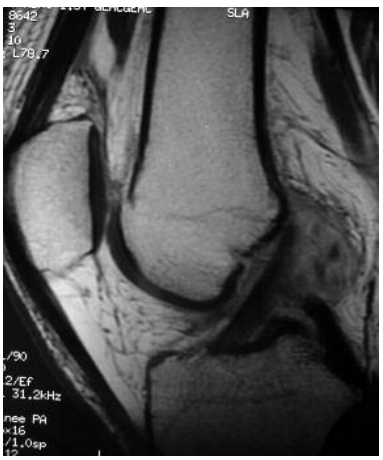
Tenosynovial giant cell tumors (TGCT) arise from the synovial tissue of the joints, tendon sheaths, mucosal bursas, and fibrous tissues adjacent to tendons. These slow-growing tumors may present in localized or diffused forms. The localized form is rarely intraarticular and large joints such as the knee are uncommonly affected. We report here in an original case of an intraarticular TGCT of the tendon sheath arising from the posterior cruciate ligament (PCL). Few reports of TGCT at this site have been previously described in the literature (1-4).

Case report

An otherwise healthy 38-year-old man, with no history of trauma, presented with history of mild and worsening right knee pain evolving from 3 months. This pain was triggered by climbing up and down the stairs. Physical examina¬tion did not revealed any localized joint-line tenderness around the knee. The knee was found to be stable: lachman test, pivot shift test, anterior and posterior drawer test, and meniscal tear tests were all negative. Knee range of motion was limited by mild pain during flexion from 100 degrees, while it was com¬plete during extension.

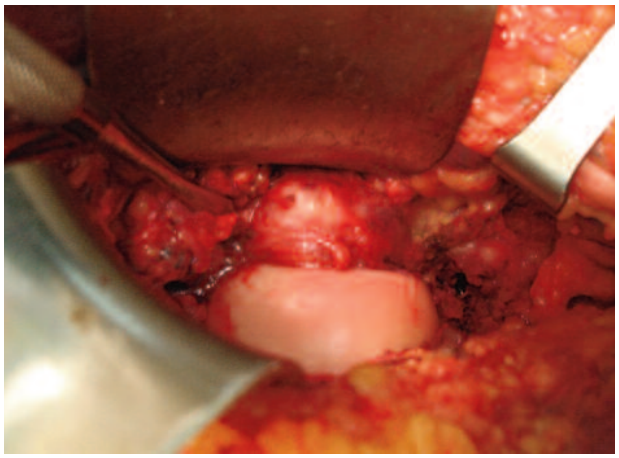
Radiographs of the knee were normal. MRI revealed a well-defined intra-articular mass in the posterior region of the knee closely related to the PCL. Neither ligament nor corti¬cal bone was involved. The mass was isointense to the muscles and hyperintense to the PCL on T1-weighted MRI and was hyperintense to the muscles and the PCL on T2-weighted MRI (Figure 1).

Figure 1 : T2-weighted sagittal MRI showing a well-defined intra-articular mass in the posterior region of the knee closely related to the PCL. The mass is hyperintense to the muscles and the PCL.



Given this tumoral aspect, we opted for open surgical resection rather than arthroscopy. At surgery, we detected a 2 X 3 X 2 cm yellowish/tan and shiny mass which was widely removed from the PCL (Figure 2). The posterior joint capsule was not involved.

Figure 2 : Intraoperatively photography showing a 2 X 3 X 2 cm yellowish/tan and shiny mass.



The histopathological examination revealed a lobulated pattern of the tumor (Figure 3) which was made of histiocytes, foam cells and multinucleated giant cells scattered throughout a fibrous hypocellular stromal background (Figure 4). These histological findings were consistent with a TGCT of the PCL. After surgery, the patient had no more complaints and there was no clinical or MRI evi¬dence of recurrence at 2 years follow-up.

Figure 3 : A lobulated pattern of the tumor (Hematoxylin Eosin x 100)

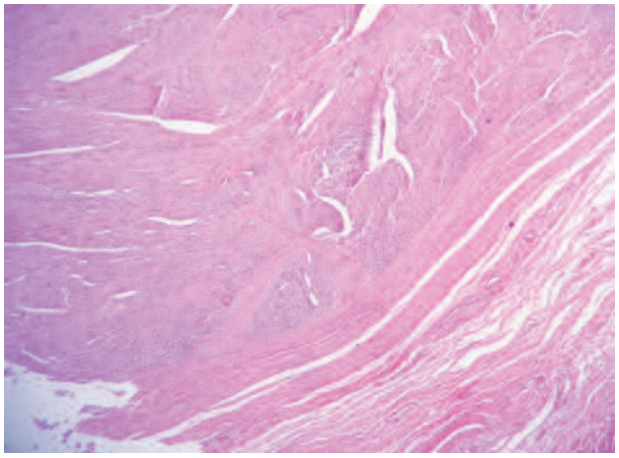
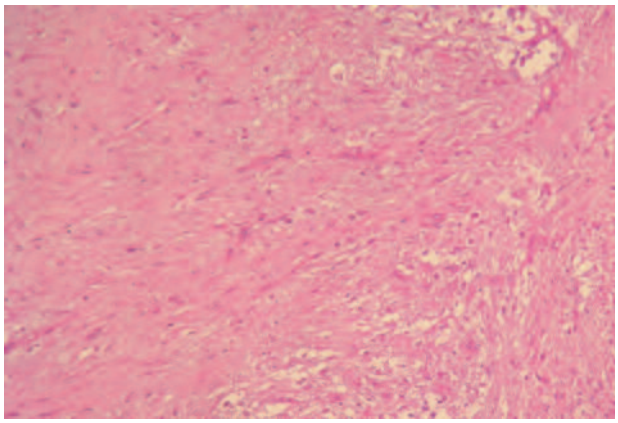


Figure 4: The tumor is made of histiocytes, foam cells and multinucleated giant cells scattered throughout a fibrous hypocellular stromal background (Hematoxylin Eosin x 400)



Conclusion

We reported here in a histopathologically-proven TGCT of the tendon sheath arising from the PCL. To the best of our knowledge, this is the fifth case described in the literature. Localized forms of TGCT exceptionally involve the larger joints and are very rarely intra-articular. The intra-articular form occurs almost exclusively in the knee. As in our patient, masses are generally well circumscribed with a dense capsule and no joint effusion. Although non specific, MRI is the best noninvasive diagnostic technique. Local excision by arthroscopy or open surgery is the treatment of choice. In our case, we preferred to practice an open surgery given the nonspecific tumor appearance on MRI.

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Renal colic as initial presentation for herpes - zoster infection in an adult female

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Acute renal colic (ARC) is usually referred to an urologist, and the principal concerns are to treat pain and determine the underlying aetiology. Although the diagnosis of ARC is clinical, a long list of non-urinary pathological conditions may mimic it. Herpes zoster (HZ) results from reactivation of latent varicella zoster virus in sensory dorsal root or cranial nerve ganglia. HZ usually begins with a prodrome, such as pain, itching or tingling in the area that becomes affected. This may precede the characteristic rash by days or even weeks (1). Bogomolov et al (2) found that about one out of 8 patients with HZ (over a series of 170 patients) had been erroneously diagnosed before the appearance of herpetic eruption as having other diseases (erysipelas, renal colic, acute pancreatitis, acute abdomen..). This point to the difficulties encountered in making the diagnosis at the initial disease period. Moreover, this infection might also occur without skin lesions (zoster sine herpete) so that serological assays for the early detection of virus DNA can be useful (3).

HZ usually manifests as a painful vesicular rash along a dermatomal distribution that may be accompanied by pain that is localized to the area (1). Pain associated with HZ should be treated early and if a patient responds poorly, he should be referred rapidly to pain specialist.

Herein we present a case of HZ miming renal colic at early presentation. We didn't find that the early treatment, which included Antiinflammatory medications, affected the presentation of symptoms or alter the immune response to the virus.

Case

A 66-year-old patient, with no particular medical history, presented for isolated right acute renal colic. She reported no gastrointestinal problems or bowel or bladder dysfunction. There

was no history of trauma and she denied any systemic upset. On examination she appeared well, apyrexial and her abdomen was soft and non-tender. Renal and abdominal ultrasounds didn't reveal any abnormalities. Laboratory data showed a normal white blood cell count. The erythrocyte sedimentation rate and C-reactive protein were normal. Urinalysis was negative. We concluded to atypical low back pain. Antiinflammatory medications provided some relief. Two days later she was admitted for right lumbar typical zoster exanthema. The rash appeared in the right upper lumbar region and involved the right T11-L1 dermatome. She had a patchy, vesicular appearance in different stages of progress. The rash was mildly pruritic and painful. Oral acyclovir in addition to analgesics leads to rapid decrease of pain and exanthema.

Her symptoms slowly improved. She remained afebrile and neurological examination remained normal. Her rash resolved over 9 days, consistent with the typical course for HZ infection. At clinic review two months after her initial presentation there was complete resolution of both the vesicular rash and pain.

Conclusion

Herpes zoster should be included in the differential diagnosis of renal colic especially in patients with normal physical and imaging findings.