

57 yo M with right shoulder pain

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Lipoma arborescens

- Arborescens comes from Latin for "treelike" appearance.
- First described by Albert Hoffa in 1904.
- Other terms that have been used in the literature include:
 - Diffuse lipoma of the joint
 - Diffuse synovial lipoma
 - Diffuse articular lipomatosis
 - Fatty infiltration of the synovial membrane
 - Villous lipomatous proliferation of the synovial membrane.



Lipoma arborescens



- Benign subsynovial villous proliferation of mature fat cells.
- Exact etiology not defined, but thought to be a nonspecific reactive response to chronic mechanical/traumatic or inflammatory stimuli, NOT a true neoplasm.
- MR features include frond-like synovial proliferative masses that follow fat signal on all sequences, joint effusion, and absence of susceptibility artifact.
- "Frequently described as rare, but imaging diagnosis was very difficult prior to the advent of MRI."

Clinical presentation

- Gradual onset painless swelling, sometimes over several years.
- Progressive pain and intermittent joint effusions.
- Usually monoarticular (95%), most commonly affects the knee.
 - Cases reported in shoulder, hip, ankle, elbow, wrist.
- Idiopathic primary type occurs in younger patients with normal laboratory values (ESR, RF) and negative for crystals/cells/infection.
- Secondary type typically occurs in the 5th-7th decades of life (but also occurs in young patients with chronic arthritis) with underlying chronic irritation, such as degenerative disease, trauma, meniscal injury or synovitis.
- Treated with synovectomy but may recur.



Pathology



Photomicrographs of extra-articular lipoma arborescens show several papillaroid structures (arrows) with synovial lining cells (arrowheads), which contain a stroma that exhibits increased mature adipose tissue (stars) [Haematoxylin & eosin (a) \times 2; (b) \times 4].

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References

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- http://radsource.us/lipoma-arborescens/