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Answer: Calcific tendonitis of supraspinatus tendon

Calcific tendonitis is a disorder that is characterised by deposits of hydroxyapatite (crystalline calcium phosphate). When calcium builds up in an affected tendon, it can lead to a build up of pressure, as well causing a chemical irritation. Calcific tendonitis most commonly affects the rotator cuff tendon of the shoulder. It has also been reported to affect the wrist, elbow, thigh, knee, ankle and foot.¹

Calcific tendonitis of the rotator cuff can be classified depending on the time of its onset into three types: acute, subacute, and chronic. Within the rotator cuff complex, the supraspinatus tendon is the most commonly affected. The calcium deposit reduces the space between the rotator cuff and the acromion, causing an impingement. The cause of the calcium build-up in the rotator cuff is still unknown.²

The incidence of rotator cuff calcification without shoulder symptoms in the general population is 3-20%. The incidence is highest in adults aged between 30 and 50 years and are particularly common in patients with diabetes mellitus.³ Women are affected slightly more frequently than men (in house

wives and clerical workers, the right shoulder is affected slightly more than the left).⁴

When calcific tendonitis is symptomatic, it may present with acute severe pain with disability, nocturnal discomfort or chronic, relatively mild pain similar to impingement syndrome.

The calcific deposit can be seen on plain radiograph, however ultrasound scan is better to detect small calcific deposits. Ultrasound scan also allows assessment of the size of the deposit in all directions.

Most patients respond to non-operative management consisting of non-steroidal anti-inflammatory drugs (NSAIDs) and regular physiotherapy. However, some may benefit with corticosteroid injections and /or ultrasound guided barbotage where the calcific deposits are injected with saline and aspirated.

Operative management such as Arthroscopic or mini-open subacromial decompression and excision of calcific deposit can be offered when conservative management has failed. The goal is to reduce the effects of impingement to the rotator cuff tendon.

REFERENCES

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