Top 5 tips: Crystal disorders
(CPPD, Calcium Pyrophosphate Dihydrate Crystal Deposition Disease
HADD, Calcium Hydroxyapatite Crystal Deposition Disease)

Arthritis Subcommittee
TIP #1

Calcifications on radiographs: The prevalence increases with age. Using radiographic knee chondrocalcinosis as diagnostic criterion, it is uncommon below the age of 55 years and increases to 20-30% over the age of 80 years. Calcifications may become symptomatic in the elderly.
Three to five different forms of CPPD manifestations are reported in the literature:

1: asymptomatic chondrocalcinosis
2: acute arthritis (pseudogout)
3: chronic arthritis (pseudo-RA)
4: chronic-destructive arthropathy (CPPD with OA)
5: tumoral CPPD (CPPD with tophi)

More than one form may be present at the same time, hampering the diagnostic process.
EULAR recommendations for the diagnosis of CPPD are based on:

- rapid development of inflammatory symptoms
- the location of arthritis (knee, shoulders, wrist)
- age of the patient (>65 years), imaging findings
- absence of another disease (eg, rheumatoid arthritis and septic arthritis).

This acute onset of CPP arthritis is self-limiting.
TIP #4

- HADD is self-limiting, consider barbotage to accelerate its course.
- Barbotage is invasive, needs coordinating skills, and is time consuming but it is reported to accelerate the natural course of HADD in randomized controlled trials.
- Success-rates are lower in patients with long lasting disease.
The resorption of HADD crystals may cause clinical symptoms.

In case of spontaneous resorption:
- in the rotator cuff a bursitis of the shoulder can occur;
- in the prevertebral longus colli muscle an acute tendinitis may occur and it should be differentiated from an infection, abscess.
References


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