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CLINICAL IMAGE

Sclerochoroidal calcifications associated with early-onset calcium pyrophosphate deposition disease

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Presentation

A 40-year-old woman with calcium pyrophosphate deposition disease (CPPD) presented to the emergency department with intense migraine and vomiting. Computed tomography of the head was negative but bilateral calcifications of the globe were noted (Fig. 1a, b). Ophthalmologic examination with fundoscopy and optical coherence tomography confirmed the presence of multiple bilateral subretinal yellow-white lesions consistent with sclerochoroidal calcium pyrophosphate deposits. No eye treatment was needed and leflunomide, colchicine, and prednisone for CPPD were continued.

The patient was diagnosed with early-onset CPPD at the age of 26 on the basis of synovial fluid analysis from the knee joint revealing rhomboid-shaped calcium pyrophosphate crystals with weakly positive birefringence under compensated polarized light microscopy. During follow-up, x-rays of different sites showed intra-articular calcifications (Fig. 1c), and knee arthroscopy demonstrated white-clustered crystal deposits (Fig. 1d). The patient had normal renal function, and we ruled out Bartter syndrome, Gitelman syndrome, sarcoidosis, and disorders of calcium and phosphate metabolism. DNA sequence analysis excluded a mutation of the ANKH gene.

Discussion

Although retinal calcium deposits have rarely been described in young patients with chondrocalcinosis [1], a relationship between CPPD and sclerochoroidal calcifications has been suggested in literature [2], and our findings corroborate this possible association.

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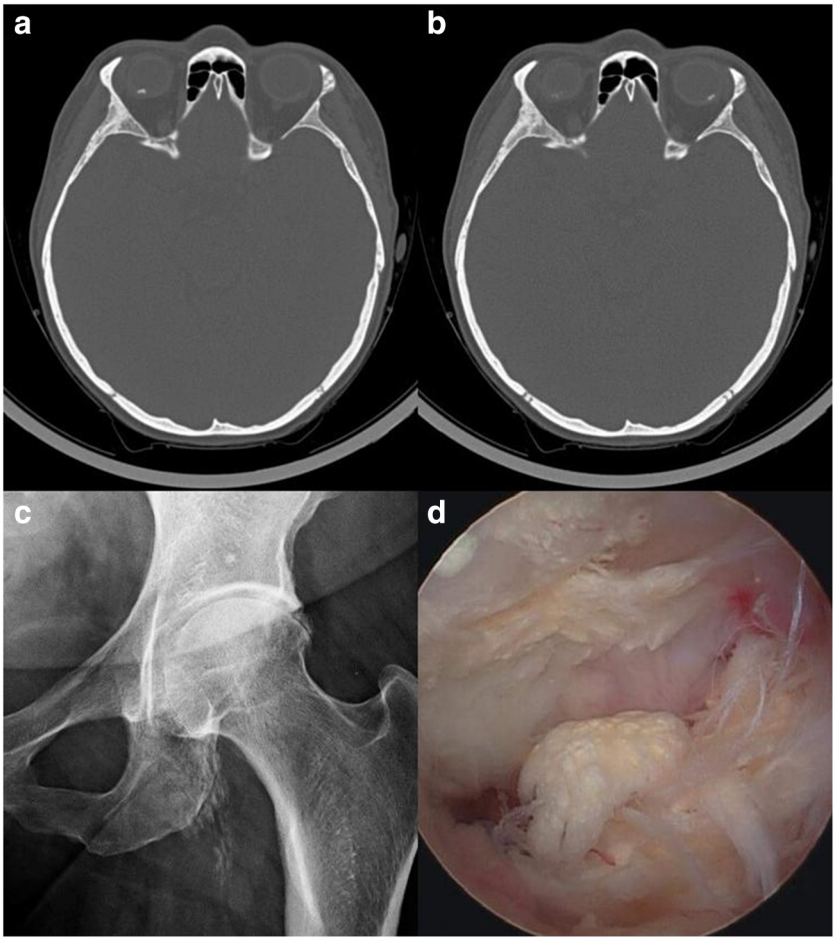

Fig. 1 **a**, **b** computed tomography of the head showing bilateral calcifications of the globe; **c** x-ray showing acetabular labrum chondrocalcinosis; **d** arthroscopic demonstration of chondrocalcinosis

Compliance with ethical standards

Disclosures None.

References

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