## Clinical vignette

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### Silent acro-osteolysis in a patient with psoriatic disease and recurrent micro-trauma

A 42-year-old woman with a 15-year history of psoriatic disease with skin, nail and joint involvement presented for a routine follow-up visit. The patient did not complain of relevant articular symptoms, physical examination was unremarkable excepted for feet nail onychodystrophy and routine laboratory tests were unaltered.

Feet X-ray, performed for periodic evaluation of damage, revealed a severe bilateral hypoplasia of the nail phalanx of the first finger that was not detectable 10 years before. When further interrogated, the patient confirmed the absence of relevant foot complains but reported to have practised martial arts at length. A subsequent MRI revealed bilateral oedema of the cancellous bone of the middle and distal phalanges of the IV and V fingers without inflammatory changes at the first one (Fig. 1).

Acro-osteolysis is a slow bone resorption of the distal phalanges with unknown pathogenesis occasionally reported in psoriatic disease [1]. Noticeably, we reported it in a patient with controlled joint disease and a history of chronic micro-trauma. Since a 'Koebner-like' phenomenon has been reported in psoriatic onychopathy and enthesoarthritis [2], we postulated that an analogous process could play a role also in acro-osteolysis as a consequence of a subtle chronic inflammatory process, as suggested by adjacent fingers MRI oedema.

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Fig. 1 Comparison of previous (A) and current (B) feet X-Ray with current feet T1 (C) and STIR (D) MRI

STIR = suppress signal from fat; DX = right side; SN= left side

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#### Data availability statement

Data are available upon reasonable request by any qualified researchers who engage in rigorous, independent scientific research, and will be provided following review and approval of a research proposal and Statistical Analysis Plan (SAP) and execution of a Data Sharing Agreement (DSA). All data relevant to the study are included in the article.

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