

## Case illustrated

## Cutaneous digital tuberculosis in immunocompetent host

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A 36-year-old man without any medical history presented with a 2 cm isolated well limited non-purulent papillomatous, erythematous lesion on the 4th finger of the right hand evolving for 9 months (Fig. 1). He reported no trauma. The general physical examination and the hand X-ray were completely normal. The initial biopsy revealed epithelioid and giant cell granuloma without necrosis (Fig. 2) and with a negative AFB stain leading to a chronic acneiform dermatitis diagnosis. Treatment with topical corticosteroids were not effective. Second biopsy wasn't more contributive including specific bacterial and fungal culture. A third biopsy was performed looking for mycobacteria which was negative in direct examination and specific PCR but culture returned positive for multi-sensitive *Mycobacterium tuberculosis* after one month. The patient were totally asymptomatic for general tuberculosis symptoms. Nevertheless a chest scan was performed due to the diagnosis of cutaneous digital tuberculosis bringing to light a cavernous extensive pulmonary tuberculosis (Fig. 3). Sputa were positive on direct examination and culture for *Mycobacterium tuberculosis*. HIV serology and pursuit for primary immunodeficiency were negative. A classic quadritherapy was initiated with a rapid regression of the cutaneous lesion (Fig. 4). The case investigation permitted to identified 1 secondary

pulmonary tuberculosis, 3 cases of latent tuberculosis, and 2 infants in the patient's entourage requiring treatment.

Tuberculosis remains a common disease affecting 10 million people a year and responsible for 1.6 million deaths in 2017 [1]. The cutaneous localization represent less than 1%, including in highly endemic regions [2]. They manifest themselves heterogeneously depending on the patient immunity, as in Hansen disease with pauci and multi bacillary forms. The diagnosis must be made in the presence of a chronic papillomatous skin lesion associated with granulomatous histology. We report here a rare form of cutaneous localization of tuberculosis [3]. This clinical case reminds us that the presentation of tuberculosis can be atypical and that its early diagnosis remains a major issue.

**CRedit authorship contribution statement**

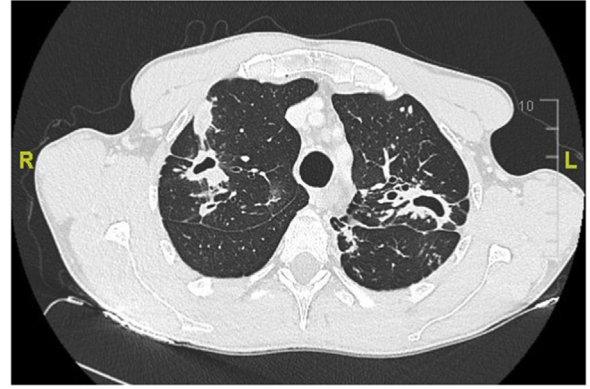
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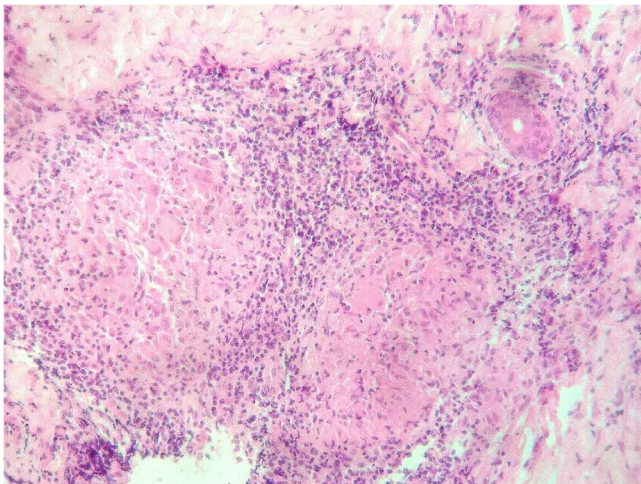
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**Fig. 1.** Cutaneous lesion at the diagnosis of tuberculosis.



**Fig. 3.** Chest scan revealing extensive tuberculosis with multiple cavernous.



**Fig. 2.** Histopathology of the skin lesion with epithelioid and giant cell granuloma without necrosis.



**Fig. 4.** Cutaneous lesion after 3 month of treatment.

## References

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