

## Case for diagnosis\*

*Caso para diagnóstico\**

Rodrigo Pereira Duquia<sup>1</sup>  
Ernani Siegmann Duvelius<sup>3</sup>

Hiram Larangeira de Almeida Jr<sup>2</sup>  
Manfred Wolter<sup>4</sup>

**HISTORY OF THE DISEASE**

Seventy-six-year-old female patient, who present with lymphadenopathy in the cervical (Figure 1) and left axillary region two years before. After one year, fistulization and drainage of whitish material from the lesions began, along with weight loss and appearing of annular lichenoid lesions with atrophic center in the dorsal region (Figure 2), slightly pruritic. Six months ago, a biopsy of the cervical region was performed, with inconclusive findings. Afterwards, the patient was referred for dermatological evaluation, when material was collected from the cervical region, cultured and tested by means of Polymerase Chain Reaction (PCR). Besides that, biop-

sies were carried out for the dorsal lichenoid lesions, and Mantoux test and routine laboratorial examination were requested, under the suspicion of scrofuloderma and lichen scrofulosorum. At this occasion, patient presented bad general state and persistent fever, with important weight loss and lack of appetite.

Reaction to Mantoux was intense, 24 mm, with a globular sedimentation rate of 96 mm, negative culture of cervical material, and PCR positive for *Mycobacterium tuberculosis*.

Histopathological examination of the dorsal lesions revealed focal spongiosis in the epidermis, with a few necrotic keratinocytes, presenting an epi-



**FIGURE 1:** Erythematous lesions with hematic crusts covering fistulas in the left cervical region



**FIGURE 2:** Annular lichenoid lesions, with central atrophy in the dorsal region. In detail on the right hand-side, central atrophy and annular popular borders are made more evident

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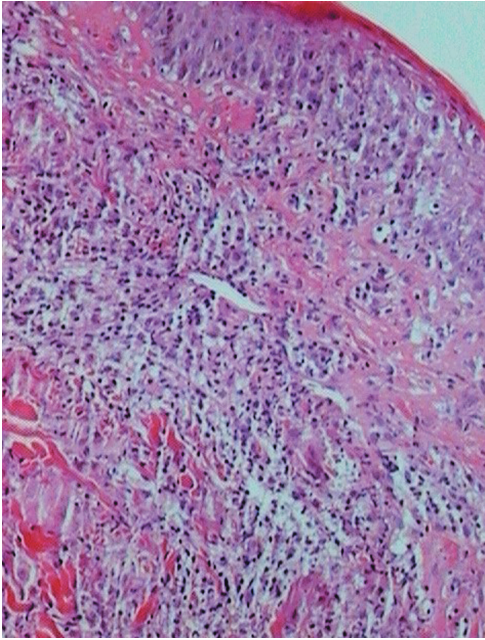
Conflict of interests: None.

<sup>1</sup> Internist and Attending Physician of the Residency Program in Dermatology at Santa Casa de Porto Alegre - Porto Alegre (RS), Brazil.

<sup>2</sup> Associate Professor of Dermatology at Universidade Federal de Pelotas and of the Master's Degree Program in Health and Behavior at Universidade Católica de Pelotas - Pelotas (RS), Brazil.

<sup>3</sup> Attending Physician of the Residency Program in Dermatology at Santa Casa de Porto Alegre - Porto Alegre (RS), Brazil.

<sup>4</sup> Dermatopathologist at the University of Frankfurt, German.



**FIGURE 3:** Histopathology showing epithelioid cell granuloma, with eczematization, compatible with *Lichen Scrofulosorum*

thelioid cell inflammatory infiltrate in the dermis with a few giant multinucleated cells, without caseous necrosis (Figure 3). No alterations were observed in the deep dermis or adipose tissue. No bacilli were observed upon Ziehl-Neelson stain, nor upon Alcian-PAS stain.

**Conclusion** – Epithelioid cell granuloma, with eczematization, compatible with *Lichen Scrofulosorum*.

Therapy was instituted with rifampicin, isoniazid and pyrazinamide, with considerable improvement of the general state in the first week, improve-

ment of axillary and cervical lesions after the first month of treatment and improvement of dorsal lichenoid lesions from the third month of treatment on.

#### COMMENTS

Tuberculids are cutaneous immunological reactions to the presence of the tuberculosis bacillus.<sup>1</sup> Currently, only three entities are considered to be true tuberculids: papulonecrotic form, erythema induratum and *lichen scrofulosorum* (LS).<sup>2</sup> LS was recognized in the first time by Hebra, in 1860, being the most rare tuberculid, and being characterized for presenting small lichenoid follicular papules, which may merge, forming annular lesions. Another feature is the presence of a strongly reactive Matoux test in most cases.

Diagnosis of this tuberculid is made by means of clinical and histopathological examination, and by regression of the lesions after onset of tuberculostatic treatment. Over the last few years, some centers have tried to use PCR for the identification of rests of bacillus DNA in tuberculids, but sensitivity and specificity of the test for LS are still unknown.<sup>3</sup>

Only infections by *Mycobacterium tuberculosis* were formerly believed to be able to lead to the appearing of LS, but there already are reports of LS in patients infected by *Mycobacterium avium*.<sup>3</sup>

Duration of treatment with tuberculostatic agents is defined by location of primary infection; thus, subjects with lesions that are clinically compatible to LS should undergo Mantoux test and clinical investigation for tuberculosis, in order to define infection site, consequently treatment duration time. □

**Abstract:** Tuberculids are cutaneous immunologic reactions to the presence of tuberculosis, which is often occult elsewhere in the body. A wide range of skin disorders has been interpreted as tuberculids in the past. Currently, however, only three entities are regarded as true tuberculids: papulonecrotic tuberculid, erythema induratum and lichen scrofulosorum. Patients with lichen scrofulosorum have a strongly positive tuberculin reaction and an excellent response to treatment with antituberculous drugs.

**Keywords:** Antituberculous agents; *Mycobacterium tuberculosis*; Tuberculosis, cutaneous

**Resumo:** As tuberculídes são reações cutâneas imunológicas à presença de tuberculose, que com frequência se encontra oculta no organismo. Antigamente um grande número de lesões cutâneas era interpretado como tuberculíde. Atualmente, porém, apenas três entidades são consideradas verdadeiras tuberculídes: tuberculíde papulonecrotica, eritema indurado e o líquen scrofulosorum. Pacientes com líquen scrofulosorum apresentam forte reação ao teste de Mantoux e excelente resposta aos tuberculostáticos.

**Palavras-chave:** Antituberculosos; *Mycobacterium tuberculosis*; Tuberculose cutânea

## REFERENCES

1. Thami GP, Kaur S, Kanwar AJ, Mohan H. Lichen scrofulosorum: a rare manifestation of a common disease. *Pediatr Dermatol.* 2002;19:122-6.
2. Park YM, Hong JK, Cho SH, Cho BK. Concomitant lichen scrofulosorum and erythema induratum. *J Am Acad Dermatol.* 1998;38:841-3.
3. Komatsu H, Terunuma A, Tabata N, Tagami H. Mycobacterium avium infection of the skin associated with lichen scrofulosorum: report of three cases. *Br J Dermatol.* 1999;141:554-7.

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*MAILING ADDRESS:*

*Rodrigo Pereira Duquia  
Rua Engenheiro Alfredo Corrêa Daudt, 205  
90480-120 - Porto Alegre - RS - Brazil  
E-mail: rodrigoduquia@terra.com.br*

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