
Tuberculosis abscess of the chest wall: About 11 cases in the hospital center of Agadir

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Key question : Chest wall abscess is the tuberculosis often incriminated ?

Key findings : Tuberculosis should be in the check list as an etiology of chest wall abscess

Take-home message : Tuberculosis chest wall abscess still an etiology to never forget specially in country with low income

what is known : - Tuberculosis is frequent
-Polychemotherapy is the reference treatment

what this study adds : - A rare expression of tuberculosis
- Drainage and debridement if major in treatment
- Actinomycosis should be searched too .

Abstract

Objectives : The objective of our study is to describe the clinical, diagnostic, therapeutic and evolutionary characteristics of all the patients treated in our training for tuberculosis of the thoracic wall.

Methods :

A descriptive retrospective study of all patients treated in our department for chest wall abscess of which the confirmation of the tuberculosis origin has been obtained by bacteriological or histological evidence from Mars 2020 to Mars 2022 .

Results :

11 patients were included where the evidence of tuberculosis origin was confirmed after etiological investigation, and having benefited from an antibacillary treatment whose short-term evolution was good and without complications

Conclusions :

Tuberculosis is still a disease of current interest in developing countries and can still take deceptive forms and involve unusual localizations .The extrapulmonary form represents 15% of all forms of tuberculosis, including the thoracic wall invasion .The extrapulmonary form represents 15% of all forms of tuberculosis, including the involvement of the chest wall. The abscess form represents an unusual and rare form of tuberculosis and is often diagnosed late. Imaging, especially CT scans, can often eliminate malignancy and other tissue and bone localizations. The detection of the germ by direct¹ examination of the pus is rare, which explains the therapeutic delay, so the interest of PCR cannot be denied in this cases.

The latter allows a rapid diagnosis and therefore the beginning of a standard anti-tuberculosis treatment which can be modified later according to the results of the cultures.

Key words : Tuberculosis , chest wall , infection , rare localisation

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I. Introduction

Tuberculosis is still a disease of current interest in developing countries and can always take deceptive forms and involve unusual localizations. The affection of the thoracic wall, in the form of abscesses, represents an unusual and rare form and is often diagnosed late. Imaging, especially CT scans, can often rule out malignancy and other tissue and bone localizations. The diagnosis often depends on several special bacteriological and anatomopathological studies. In our study, the clinical, diagnostic, therapeutic and evolutionary characteristics of 11 patients treated in our training for tuberculosis of the chest wall were described.

II. Material and Methods

This is a retrospective descriptive study that was realized in the department of thoracic surgery of our training over a period of 2 years, which included all the patients taken in charge for abscesses of the thoracic wall and whose tuberculosis etiology was confirmed by direct examination, PCR or by anatomo-pathological examination. Empyema of necessity and osteoarticular tuberculosis were excluded from our study.

III. Results

During the study period, 11 patients were treated in our clinic for cold abscesses of the thoracic wall. The predominance of women was noted with a sex ratio of 1.2 (6/5), the average age was 40.5 years with extremes from 19 to 70 years. A history of tuberculosis or family infection was found in 36% of cases and the average time to diagnosis was 26 days. The majority of patients in our series presented with an isolated parietal abscess and in 2 cases at least 2 abscesses were found. Standard imaging or CT scans were performed in the majority of cases without finding malignant lesions or bone involvement. The diagnostic method was direct culture, which was positive in one case, tuberculin intradermal reaction and Quantiferon assay was positive in one case, PCR in the pus in 54% of cases, and anatomopathological examination showed an epithelio-giganto-cellular granuloma with caseous necrosis in 63% of cases. All patients received antibiologic treatment and 55% received surgical drainage of the abscess, while in 45% of cases an abscess fistula was spontaneous. In our study, no cases of recurrence were seen at the control consultation.

IV. Discussion

Tuberculosis still represents a health problem in developing countries and a challenge to be faced. The extra-pulmonary localization represents 15% of the forms of tuberculosis [1], its thoracic parietal form is unusual and rare and represents less than 0.1% of all forms of tuberculosis. The pathogenesis of this entity is still controversial and it is exceptionally primary. It is very often a localization arising in the course of severe and disseminated tuberculosis [1,2]. The tuberculous abscess may fistulate to the skin, as was the case in 5 patients in our series, or rarely give a second localization[3].

In our study, 11 cases of thoracic cold abscesses are reported in our structure, over a period of 2 years, in a non-drug addicted and non-immunocompromised population, which does not match the data in the literature. Without doubt, tuberculosis in our context remains a major health problem and the known exceptional forms are becoming increasingly frequent [2,3,4]. The majority of authors describe the polychemotherapy tuberculosis recommended to treat the disease and prevent its complications [4,5,6]. This antibiotic therapy should be prolonged for 6 to 9 months depending on the presence of other secondary localizations. Drainage surgery and resection of the abscess in its entirety with debridement of the underlying necrotic tissues has been described by several authors, all associated with medical treatment [7].

V. Conclusion

Thoracic parietal tuberculosis remains a rare entity even in tuberculosis endemic countries. Its clinical presentations are multiple and often confusing with diagnostic difficulties. Bacteriological or histological evidence is necessary for the diagnosis and a context of immunosuppression or drug addiction or tuberculosis infection is never necessary. Anti-tuberculosis medical treatment improves the prognosis of this disease.

Références

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Declarations

- Ethics approval and consent to participate
- All participants are ok with participation
- 7 participants consentement are available
- Consent for publication
- Verbally consents obtained

- Availability of data and materials
- All data are available and can be consult by contacting the corresponding author
- Competing interests
- The authors declare no competing interests.

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- Authors' contributions
- Dr.M Gourti : data collection
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