## https://doi.org/10.29289/259453942023V33S1056

## Chronic non-granulomatous mastitis with positive culture for *Mycobacterium tuberculosis*

Lúcio Mauro Bisinotto Júnior<sup>1</sup>, Rosemar Macedo Sousa Rahal<sup>1</sup>, Leonardo Ribeiro Soares<sup>1</sup>, Luis Fernando de Pádua Oliveira<sup>1</sup>, Hadirgiton Garcia Gomes de Andrade<sup>1</sup>, Bárbara de Assis Barbosa<sup>1</sup>, Rafaela Dutra Silva<sup>1</sup>, Ruffo de Freitas-Júnior<sup>1</sup>

<sup>1</sup>Universidade Federal de Goiás – Goiânia (GO), Brazil.

**Objective:** The objective of this study was to describe a case of chronic mastitis with multiple recurrences and positive culture for *Mycobacterium tuberculosis*. Methods: The information for this case report was obtained via a consent form, and the study was approved by the Research Ethics Committee of the Universidade Federal de Goiás HC/UFG - GO, with CAAE number: 11983719.0.0000.5078. Results: Patient N.F.R., female, 59 years old, with systemic arterial hypertension, dyslipidemia, and smoker. On July 2020, a hypoechoic, heterogeneous, lobulated mammary nodule was identified on the left, measuring 2×1 cm in the ultrasound examination. A core biopsy was performed, whose histopathology (HP) showed benign breast tissue, ductal ectasia, fibroadenosis, and lymphomononuclear inflammatory infiltrate with neutrophilic exudation. On April 2021, the condition evolved with hyperemia, edema, mastalgia, and the presence of an abscess measuring 2×2 cm. She used several antibiotics (clindamycin, cephalexin, amoxicillin-clavulanate, ciprofloxacin, and trimethoprim-sulfamethoxazole), with partial improvement. New exacerbations of the condition and recurrent fistulization were presented. The secretion of the drained abscess on January 2022 showed negative bacilloscopy and growth of multisensitive Proteus mirabilis, treated with amoxicillin-clavulanate. After 2 months, the infection control service received a culture for mycobacteria positive for the *M. tuberculosis* complex in breast secretions. The patient was summoned for an infectious disease consultation, and treatment with rifampicin, isoniazid, pyrazinamide, and ethambutol (RIPE) was initiated. A new drainage of the abscess was performed, and after 20 days of RIPE, the patient's pain improved and the fistula healed, maintaining an area of hyperemia and nodulation. She maintains treatment with the infectology and mastology team. Conclusion: The diagnosis of breast tuberculosis is challenging, and it depends on high suspicion, accurate collection of biological materials and sending them for microbiological study in a timely manner. The culture is still the gold standard, but it has low sensitivity in paucibacillary forms. HP, on the contrary, may not present tuberculoid granuloma. In this sense, the rapid molecular test for mycobacteria could increase sensitivity and early identification in tissue.

Keywords: mastitis; extrapulmonary tuberculosis; Mycobacterium tuberculosis; breast diseases.