OCCURRENCE OF ZOONOTIC SPOROTRICHOSIS IN NATAL CITY, RIO GRANDE DO NORTE STATE, NORTHEAST BRAZIL

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ABSTRACT

Sporotrichosis is a subcutaneous mycosis caused by termodimorphic fungi of the *Sporothrix schenckii* complex. Recently, zoonotic transmission has been described mainly due cat scratches, and this fact is related with recent outbreaks of sporotrichosis in Brazil. In the present study five confirmed cases of human sporotrichosis (four subcutaneous and a single one of primary pulmonary sporothrichosis) and an animal case are described. The patients were attended in the Giselda Trigueiro Hospital and Onofre Lopes University Hospital, Natal City, Rio Grande do Norte State, Brazil. The clinical samples were sent to the Laboratory of Medical and Molecular Mycology, Clinical and Toxicological Analysis Department, Federal University of Rio Grande do Norte, from October 2016 to April 2017 to perform mycological examination. ATDC, female, 13 years old, student without comorbidities reported ulcerative lesion in the left eyelid, from which we obtained a sample of secretion and fragment for biopsy. SSD, female, 32 years old, unknown occupation, with no comorbidities, presented an ulcerative and nodular lesion in the left wrist, where secretion was collected and a biopsy fragment was obtained. FSS, a 35-year-old female patient with no comorbidities presented a non-ulcerative nodular lesion in the leg from which a biopsy fragment was obtained. MPSS, female, 61 years old, housekeeper, hypertensive, presented ulcerative nodular lesion on the finger where the secretion sample was obtained. MPSS´s dog presented scrotum lesions suggestive of mycoses and samples were collected. MLSD, female, 50 years old with no comorbidities reported pulmonary manifestations and bronchoalveolar lavage was performed to collect the clinical sample. The samples were seeded on Sabouraud Dextrose Agar Medium and incubated at 25°C and 37°C for 15 days. Filamentous hyaline colonies start to grow developing a dark color with age. Colonies at 37°C presented yeast like appearance. The micromorphological analyses of filamentous colony revealed a “rosette-like” appearance, and *Sporothrix* spp. was identified. These are the first cases of human and animal sporotrichosis described in Natal city, northeast of Brazil. Molecular identification with specific primers conformed they belonged to *Sporothrix brasiliensis*. All the patients reported previous feline contact.

Key-Words: Sporotrichosis, Subcutaneous mycosis, Rio Grande do Norte, Zoonotic transmission