

A PODODERMATITIS DUE TO *TRICHOSPORON* SP. WITH PHALANGEAL OSTEOMYELITIS AND SYSTEMIC DISSEMINATION IN A DOG

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AIM TO STUDY: To report and discuss an unusual mycotic infection caused by *Trichosporon* sp. with primary pododermatitis, and secondary phalangeal invasion, with systemic dissemination.

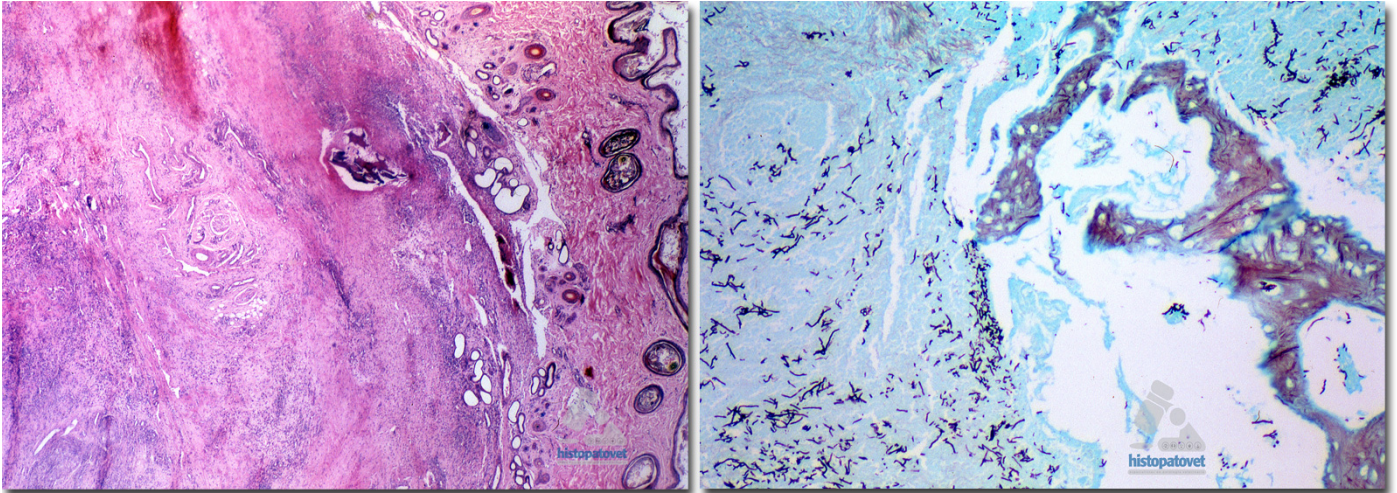
MATERIAL AND METHODS: a necropsy was performed on a female German shepherd, 14 months old, with history of lameness and swelling of the right forelimb. Direct Giemsa stain was done from heart and axillary lymph nodes. Multiples samples from affected tissues were processed for histological examination and stained with H&E, PAS, and Gomori's silver. Samples from the digit and myocardium were submitted for mycology culture.

RESULTS: clinical signs: the dog was presented with lameness of the right forelimb associated with swelling of the IV digit, and not responding to NSAIDS. During the following 6 days of hospitalization the dog became recumbent, reluctant to stand and exhibit pain on the affected limb. The dog became dyspneic on day 6 and die.

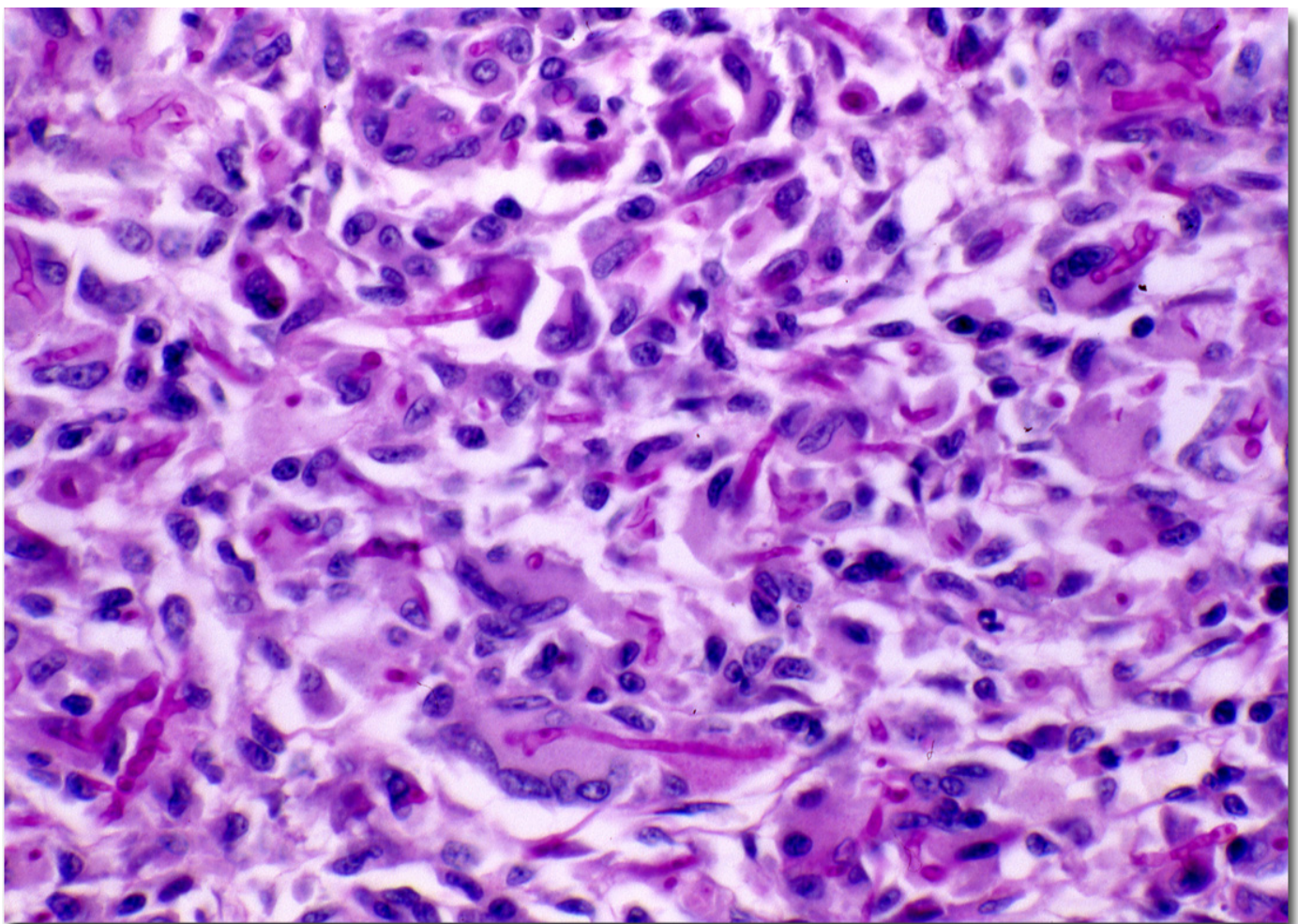
Macroscopic findings: the distal phalanx of the IV digit of the right forelimb showed ulceration with purulent material; the axillary lymph node was swollen, with yellow material observed at cut. Multiple white nodules of different sizes up to 1 to 2 centimeters in diameter with necrotic central areas were present, particularly in the heart, but also in the kidney and left adrenal gland. See the following three pictures with ulceration and interdigital necrosis. Besides nodules in the heart and pale areas kidney are seen.



Microscopic findings: necrotic areas were present in the myocardium, axillary and renal lymph nodes, kidney and adrenal glands. Surrounding the necrotic areas there were a granulomatous reaction with multinucleated cells. Occasional there was hyphae phagocytes. The fungus was selectively stained with PAS and Grocott. The affected digit showed a mycotic osteomyelitis as well. The same inflammatory findings were also observed on cytology.

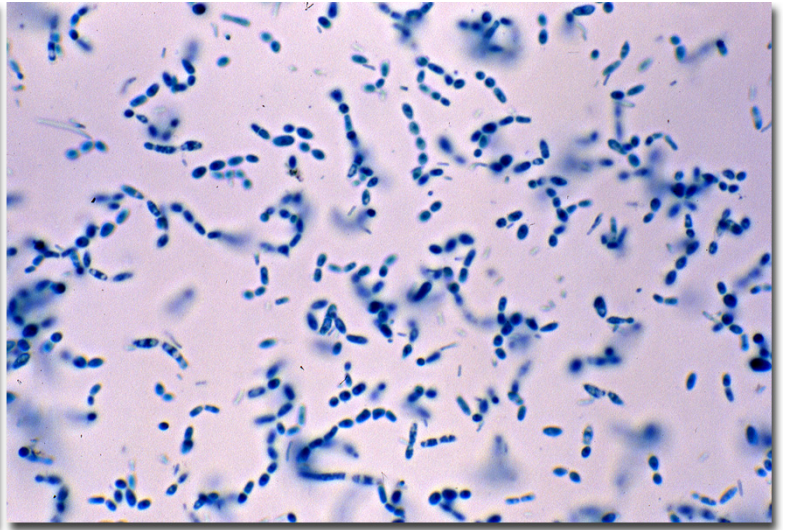
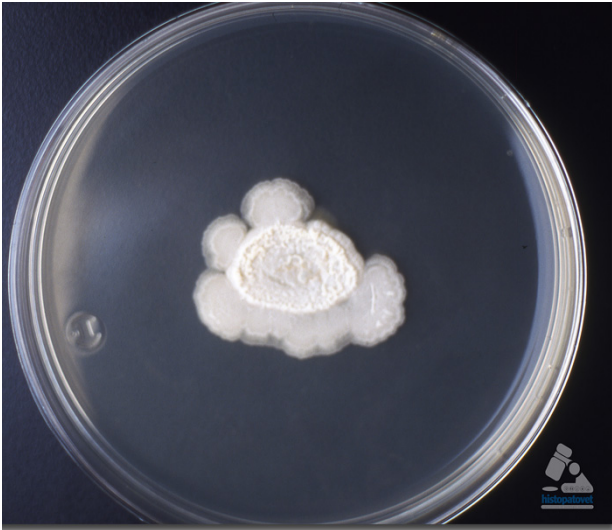


Left. Inflammation in the deep dermis. Right. Osteomyelitis. The hyphae are black (Grocott stain).



The myocardium showing a granulomatous inflammation. See the red hyphae (PAS stain).

Mycological culture: tissues from subcutaneous digits and myocardium were cultured on sabouraud's glucose agar at 37°C, growth was obtained at 48 hours. Microscopically, the fungus was identified as *Trichosporon* sp.



Culture and direct examination.

CONCLUSION: *Trichosporon* spp. are yeast like saprophytic fungus only reported in humans and few subcutaneous cases in cats, this is the first disseminated dog case reported.