



# CRYPTOCOCCAL GRANULOMATOUS DERMATITIS IN AN AFRICAN PARROT

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Cryptococcosis is considered mainly as a systemic mycosis caused by an encapsulated yeast like fungus with a worldwide distribution. There are several species of the genus *Cryptococcus*, however, *C. neoformans* is the species more frequently reported as a cause of disease in people, as well as in domestic and wild animals. The agent is most commonly isolated from soil contaminated with pigeon droppings. Aside from respiratory, central nervous and ocular, the cutaneous presentation is very rare in dogs and cats. To the author knowledge, dermal cryptococcosis in wild or captive birds has not been reported.

**Case presentation:** a one year old, female African parrot (*Agapornis roseicollis*), was presented with an ulcerative mass of 3.0 cms. diameter located at the left distal phalange wing of 6 months evolution. It was removed by surgery, however due to local infiltration it could not be excised completely.

**Dermatopathological findings:** stained with Hematoxylin and Eosin (HE) the epidermis showed ulceration. In the ulcerated area a lot of free round to oval organisms measure 6 to 12 micrometer which stained faintly pale and eosinophilic and surrounded by a clear halo were observed. Throughout the dermis multiple granulomata were presented with identical microorganisms and among them macrophages and heterophils cells were also seen. They stained positively with Gomori's methanemine silver (GMS) and PAS. Moreover, cryptococcal like organism with clear halos against a blue background were visualized in a blue India ink preparation from a material collected with the swab seven days post biopsed. The same material was also cultured on Sabouraud's agar, and identified as *Cryptococcus neoformans*.

## References recommended

Jacobs, G.J. and Medleau, L. Cryptococcosis. In Greene Infectious Diseases of the Dog and Cat, second edition, Chapter 61.

Scott, Miller, Griffin. Small Animal Dermatology, 6<sup>th</sup> edition, pag. 395-400.

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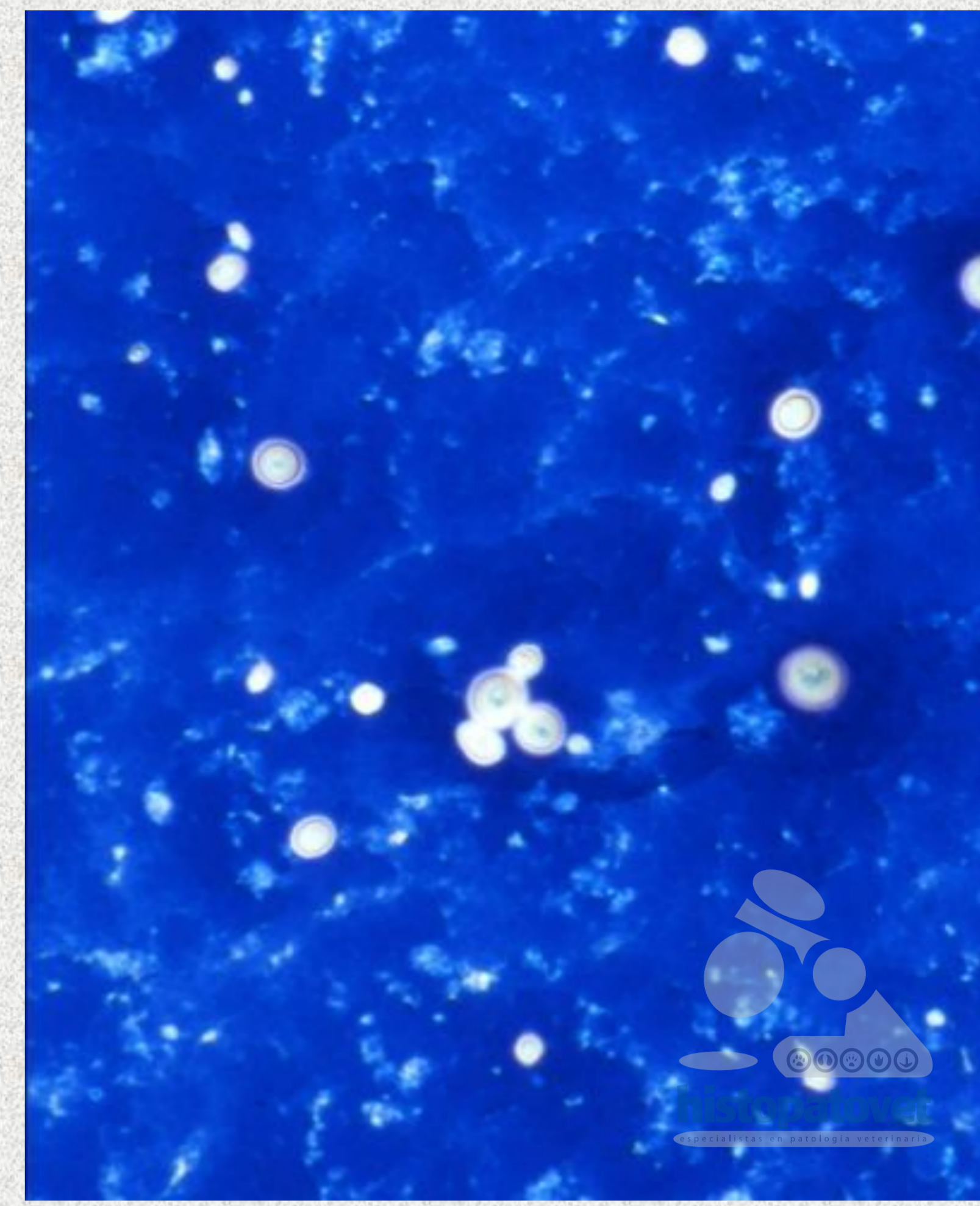


Fig. 3. A direct sample stained with blue India ink Cryptococcal like organisms with clear halos against a blue background are observed, one is budding. 40x.

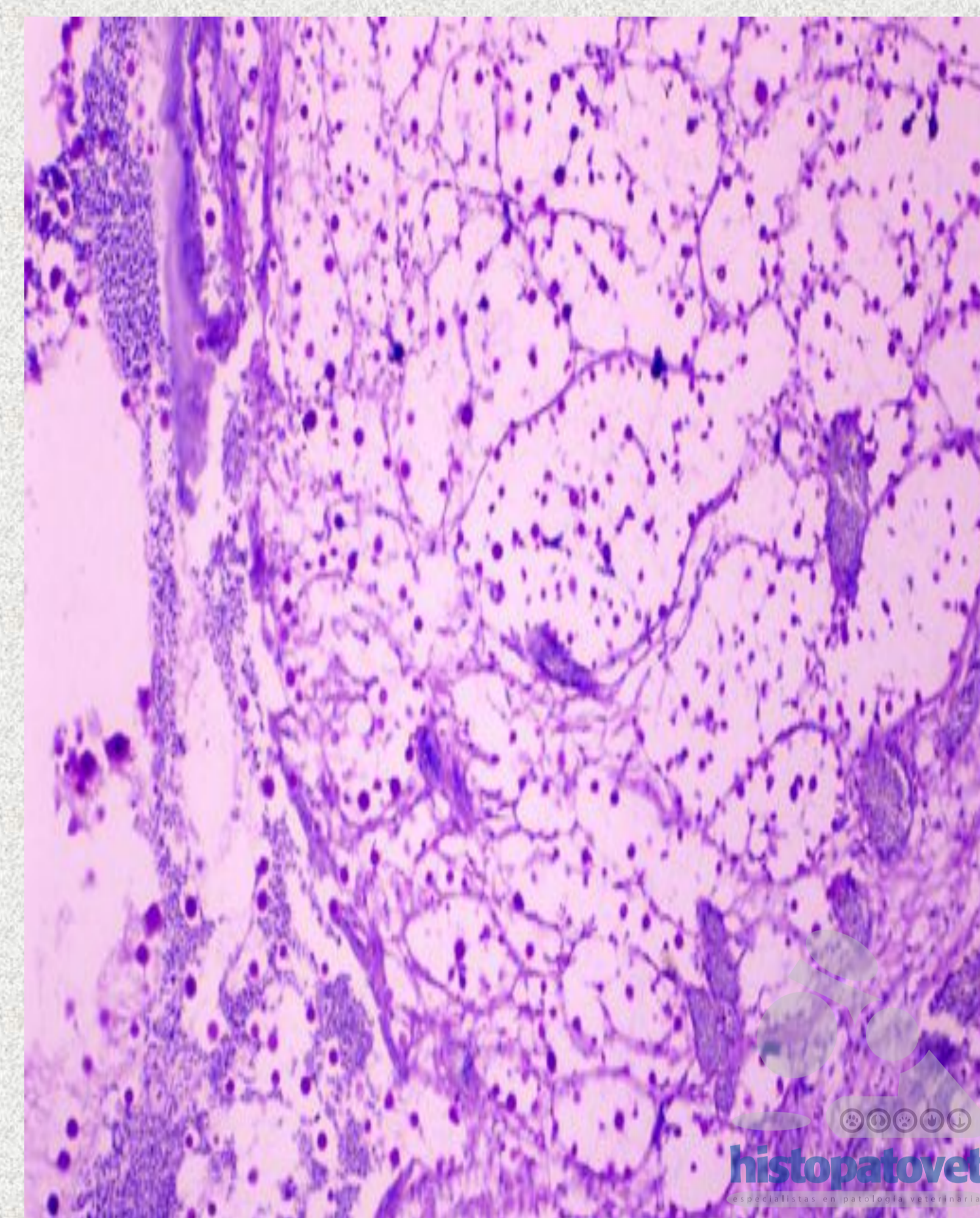


Fig. 4. The epidermis showed an ulceration, detritus and red cells. The superficial epidermis and dermis had multiple P.A.S. positive cryptococcal organisms. 10x.

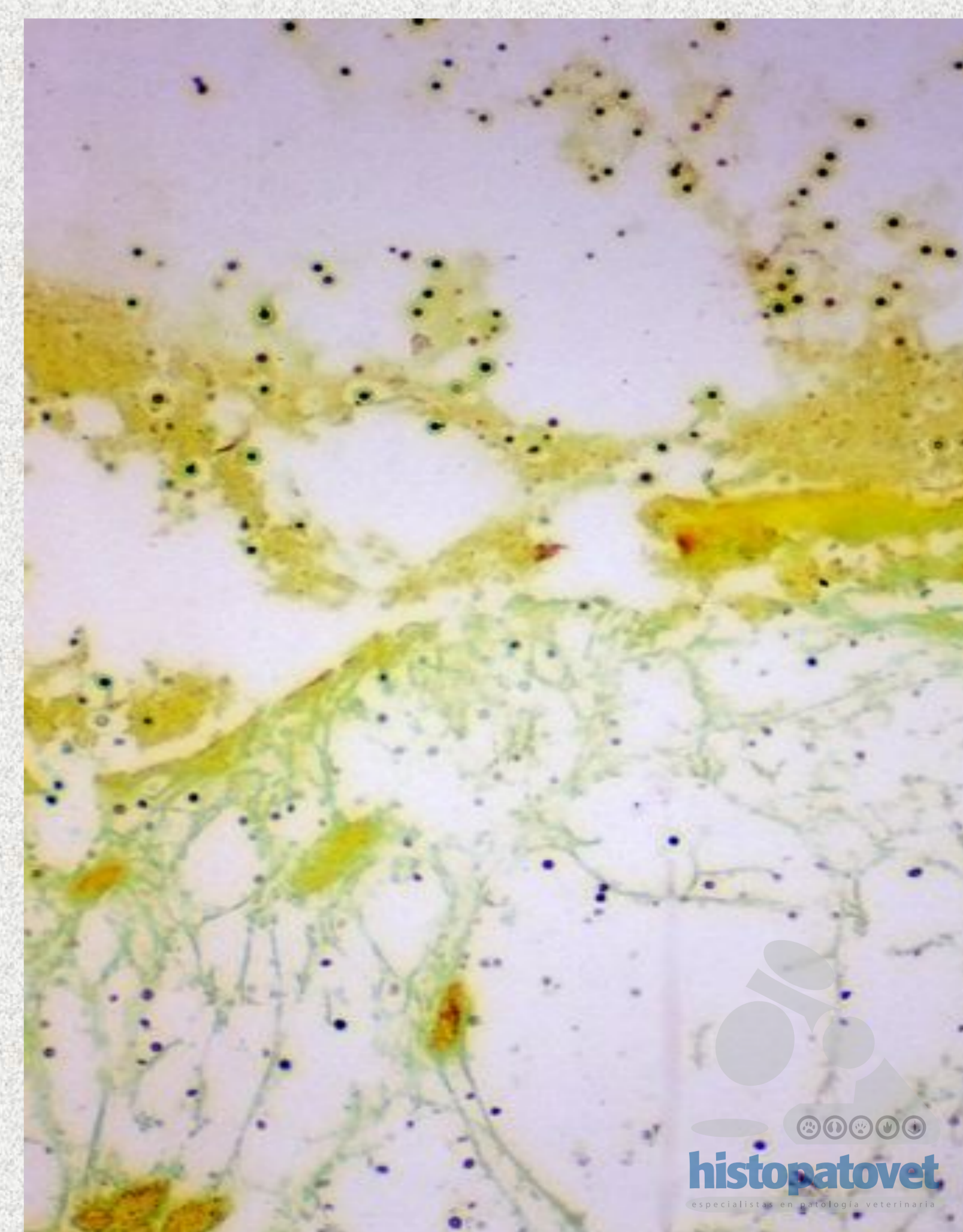


Fig. 5. The same section stained with GMS, similar organisms are observed. 10x.



Fig. 1. Gross aspect (photo taken 7 days after biopsy) still there was an ulcerative proliferative tissue.

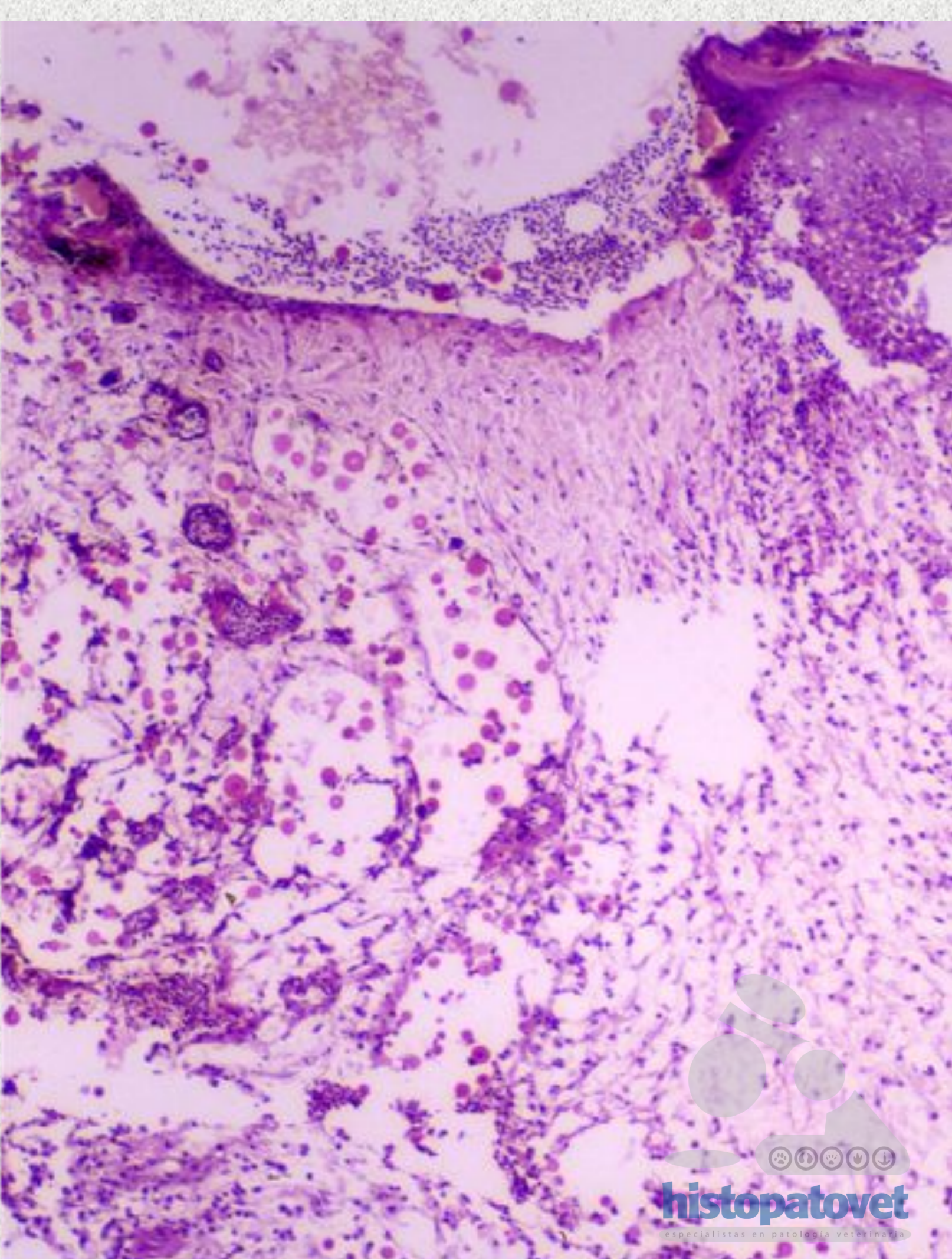


Fig. 2. The epidermis showed ulceration. A crust is observed with yeast like microorganisms. The dermis had several cavities filled with identical microorganisms with little inflammatory reaction. HE stain 10x.