ABSTRACT:

Pythiosis is a disease of a granulomatous and chronic character, caused by an oomycete Pythium insidiosum, which affects animals and humans around the world. In Brazil, it is reported in several species such as horses, cattle, sheep, dogs and cats. It is a disease of extreme importance for a country that concentrates the largest number of horses herds in Latin America and is third in the world. *P. insidiosum* is a flagellated and mobile zoospore, with an asexual reproductive structure produced in humid environments in association with plant material. Clinical signs differ in the affected species; the main characteristic of the injury in the equine species is the presence of branched cavitations filled with necrous, light yellow granular material of firm consistency, known as "kunkers", seen on the cutting surface of the affected tissue. In other species, the infection occurs in the subcutaneous or cutaneous tissue, gastrointestinal, nasal, pulmonary or bone, depending on the environment in which the animal is inserted. In the city of Petrolina-PE, a Mangalarga Marchador equine male, aged 6 years and brown hair, was attended. On clinical examination, the animal presented a granulomatous ulcerated lesion with serosanguinolent secretion, irregular border in the distal portion of the right anterior limb, with large tissue mass and the presence of kunkers of different diameters. Treatment followed with surgical removal of the lesion, and subsequent systemic treatment with intraconazole 2000mg daily for 28 days, and site cleaning with topical antibiotic administration. The samples were conditioned and sent to laboratory for analysis. The kunkers were washed in sterile distilled water containing 0.9% amoxiline for removal of excess tissue and clots and fixed in BHI agar medium 0.2% chlorhexidine and BHI broth containing 0.2% chlorhexidine. They were kept in an oven at 37 ºC for 5 days and later the presence of whitish filaments characteristic of Pythium hyphae was observed. The extraction of mycelium was carried out, with previous washing in sterile distilled water and subsequent drying, and storage in freezer -80 until the application of PCR and ELISA technique, for future confirmation. The evaluation of pythiosis cases in the region allows greater knowledge of disease to the extent of its impact, as well as the development of effective surveillance and control strategies.