Prevotella melaninogenica participation in a subcutaneous suppurative abscesses in Nelore bovine-Parana-Brazil.

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Prevotella melaninogenica is a strict anaerobic Gram-negative bacteria non-spore-forming causing infections in domestic animals. Trauma and necrosis in tissues following anaerobic facultative bacterial multiplication promote the anaerobic proliferations which require an oxigen low tension to growth. Bacterial synergisms between Arcanobacterium pyogenes and anaerobic non-spore-forming bacteria are described in the veterinary literature as an important starters of pathogenic lesions in mixed infections. Recently a Nelore bovine showing limbs generalized subcutaneous abscesses was presented at Veterinary Hospital of Federal University of Parana to receive a treatment. Inicially it was thought as a parasite lesions due Dermatobia sp. larvae. Abscesses punctions revelead a dense purulent content which was submitted to a bacteriocopic examination by Gram stain method that showed a profuse presence of a Gram-positive coryneform bacteria and pleomorphic Gram-negative bacteria. Simultaneously culture was done in aerobic and anaerobic contiditons using Blood Agar at 37°C during three and fourteen days, respectively. In order to obtain atmospheric anaerobic environment was used an Oxoid jar with a mixed gases containing 80% of N₂, 10% of H₂ e 10% of CO2. Using this aerobic and anaerobic methodology Arcanobacterium pyogenes and Prevotella melaninogenica were isolated in pure culture. A remarkable phenotypic characteristic of this anaerobic bacteria was a black-brown colonial pigment which was submitted to ultraviolet light showing a brick-red fluorescence (with a long wave UV light). The presence of these anaerobic bacteria in infections causing abscesses in domestic animals is subestimated probably due the lack of appropriate microbiological tools and conditions to isolate them.