

An observation note:**A Note on a Case of Strangles in Sinnar Area, Sudan**

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ملخص البحث

ورد الى المعمل البيطري في سنار حصان يعانى من ورم كبير في منطقة البلعوم. تم إستخراج كمية من صديد رمادى اللون من الغدة المتورمة و أرسلت الى المعمل. تم عمل شرائح و صبغت بصبغة جرام و تمت زراعة الصديد في وسط آجار الدم (sheep Blood Agar) في درجة حرارة 37م في وسط خالي من الاوكسجين (Anaerobic). عزلت بكتريا المكورة العقدية الخيلية نوع الخيلية.

Summary

A horse with an enlarged lymph node at the pharynx area visible to the outside was reported to the veterinary laboratory in Sinner. Using a syringe large amount of pus was taken. Gram Stain revealed long chain of streptococcus-like bacteria. This was then cultured onto blood agar and colonies of Gram positive cocci were grown. These were diagnosed as *streptococcus equi*, subsp *equi*.

Strangles is an acute disease of horses caused by infection with group *streptococcus equi*, which is continued to be a serious and common disease throughout the world, despite the availability of vaccine (Timoney, 1988a). Although its official is *Streptococcus equi* subsp. *equi*, there is compelling evidence that it is derived from an ancestral *S. zooepidemicus* as a genovar or biovar of the latter (Sweeney *et al*, 2005). The disease was first reported by Jordanus Ruffus as described by the above authers in 1851. It is characterized by inflammation of the upper respiratory tract and abscessation in the adjacent lymph nodes (Radostits and Henderson, 2000; Merck, 2007). Horses are the only species affected and the disease occurs at any age, particularly at the age of 1-5 years. The source of strangles infection is the nasal discharge which contaminates feed and water troughs as well as pasture. The question of where the infection persists during the intervals of outbreaks is not well answered, but the organism was found in tissues of normal horses (George *et al.*, 1983; Timoney, 1988b; Todd, 1910).

A horse was presented to the veterinary clinic at Sinnar town showing swelling of the throat region. This was referred to the veterinary laboratory for diagnosis. Aspirate

of pus from the swelling lymph node was made in a large quantity. Gram stained and culture was set up onto sheep blood agar. This was incubated at 37 °C in anaerobic environment; Gram positive streptococcus-like bacteria were seen. Small tiny haemolytic colonies of Gram positive cocci were observed. Attention was made to the Gram positive cocci in relation to the clinical signs that were typically of strangles. The Gram positive cocci were found to be catalase and oxidase negative. The pus smears showed long chains of cocci indicative of streptococci. The organism was tentatively diagnosed as *streptococcus equi* supported by the clinical signs, the finding of the pus smears and Gram stain, and the above chemical tests. It was also found that *streptococcus zooepidemicus* is associated with purulent nasal discharge but no enlargement of lymphnode (Radostits *et al*, 2000). This case of strangles was diagnosed during February 1988 and for the coming 4 years in Sennar no more cases were referred to the laboratory. Outbreaks can occur at any time during the year but are most likely to happen in cold wet weather (Radostits and Henderson, 2000). The disease seems to be very sporadic since horses in the area are only used as draft horses. Outbreaks were

not expected because the animals were not kept together. Reports on the disease were made by the Sudan Veterinary Department in 1915 and outbreaks of the disease in mounted troops were reported at Shendi in 1933. No reports on the disease were made since its occurrence in Sennar and for the coming five years later. The disease appeared to be very sporadic and of minor importance in Sennar area at least.

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