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SUPPURATIVE INFLAMMATION IN THE SOLES OF THE FEET (PODODERMATITIS) OF SRI LANKAN ELEPHANTS (*ELEPHAS MAXIMUS MAXIMUS*, LINNAEUS, 1758) AND THE CAUSATIVE BACTERIA

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Pododermatitis is a serious health problem in captive elephants in Sri Lanka (*Elephas maximus maximus*; Linnaeus, 1758) requiring intensive treatment for months or even years, and if neglected could lead to death. The objective of this study was to identify species of organisms (aerobes) involved in causing Pododermatitis in elephants to ascertain any relationship between cracks and severity of the disease. Hind legs of fifty five elephants were examined and, were categorised into groups according to the number of cracks on soles (low 1-5 cracks, medium 6-10 cracks and high 10 or more). Severity of the Pododermatitis was determined by the presence or absence of the exudate associated with the inflammation. The age groups studied were sub adults of 10-20 years, prime adults of 20-40 years and senior adults of more than 40 years. The studied population consisted of 23 males and 32 females. Thirty five (35) of the animals were senior adults, 19 were prime adults and only one was a sub adult.

Thirty five (35) animals (62%) had Pododermatitis at least in one of the soles. Fifteen animals had lesions in both hind legs, eight in right hind leg and 9 in left hind leg. The numbers of elephants who had low, medium and high numbers of cracks were 14, 33 and 3 respectively. Eight(8), 21 and 3 animals of the above respective groups had lesions of Pododermatitis. The degree of Pododermatitis was severe in 18 of the above animals and especially in the 3 animals with high numbers of cracks. *Streptococcus*, *Staphylococcus* (*S. Aureus*), *Klebsiella*, *Proteus*, *Corynebacterium* and *Escherichia coli* species were identified from cultured pus samples obtained from the lesions.

Severely overgrown soles with cracks require frequent foot trimming for recovery. Sanitation of the stable and frequent evacuation of urine and dung is necessary. Foot baths of 5% formalin can be used to harden the sole. It has been shown that a balanced diet could prevent this problem. Antibiotics are used to prevent septicaemia and to inhibit the rapid growth of bacteria which may occur as a secondary reaction to Pododermatitis.

