

## ISOLATION OF *STAPHYLOCOCCUS AUREUS* FROM WOUND OF HANUMAN LANGUR

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*Staphylococcus aureus*, the principal causative agent of human and animals staphylococcosis, is a non-motile, non-sporulating, non-capsulated, Gram-positive organism (Pal, 1997). The pathogen is implicated in various clinical disorders of man as well as animals such as dermatitis, mastitis, gastroenteritis, arthritis, pneumonitis, endocarditis, osteomyelitis and meningitis (Pal & Dube, 1981; Pal, 1997; Silverman *et al.*, 1997). The perusal of available literature indicates scarcity of information on staphylococcal infection in monkeys from India (Arora, 2003). The present communication, therefore, describes the isolation of *Staphylococcus aureus* from the wound of an adult Hanuman Langur (*Semnopithecus entellus*).

An adult female Hanuman Langur (*Semnopithecus entellus*) was brought by the citizens of Anand to the Department of Surgery and Radiology for the purpose of treatment. The Himedia (India) swab was used to collect the specimen from the wound. The wound swab obtained in 1% glucose solution was immediately brought to the laboratory of Veterinary Public Health. The smears were prepared from the swab and examined under microscope after staining with Gram's stain. The specimen was cultured onto the plates of nutrient agar, blood agar and Sabouraud's dextrose agar with chloramphenicol. The inoculated plates were incubated at 37°C for microbial growth. The detailed identification of the organism was done as per the procedures recommended by Osbaldiston (1973). *In vitro* drug sensitivity of isolate was conducted against seven antimicrobial agents using the single disc diffusion test.

On clinical examination the female Hanuman Langur weighing 14kg showed one deep wound on the right arm. The animal appeared dull, dehydrated, with severe ache in limb articulation and inability to move the arm. The body temperature was 36.6°C, pulse 58/minute and respiration 28/minute. No other abnormality could be detected. There was no growth of fungi on mycological media. Interestingly, blood agar revealed circular, smooth, raised colonies with a type of haemolysis. Golden yellow coloured colonies were seen on nutrient agar. Microscopical examination of impression smear showed numerous gram-positive, non-capsulated, non-sporulated cocci arranged like a grape bunch. The isolate was positive for catalase and coagulase, and fermented lactose, mannitol and glucose. The organism was sensitive to ciprofloxacin, chloramphenicol, enrofloxacin, gentamicin and tetracycline but was resistant to ampicillin and penicillin.

*Staphylococcus aureus* has been isolated from man, cat, cattle,

dog, deer, duck, geese, goat, horse, lion, monkey, pheasant, pig, poultry, rabbit, rhinoceros, tiger, wild civet and zebra (Pal, 1992; Blouse *et al.*, 1996; Pal, 1997; Arora, 2003). The direct demonstration of *S. aureus* in the cutaneous lesion and its isolation in pure and heavy growth from the wound specimen indicated the pathogenic role of *S. aureus* in suppurative skin lesion of Hanuman Langur. Similar observations were reported by earlier workers who reported *S. aureus* from suppurative lesion in groin lesion of a rhesus monkey that died due to tuberculosis. *S. aureus* and *Cryptococcus neoformans* were recovered from the dermal lesions on the legs and abdominal areas in elephants (Arora, 2003).

As far as could be ascertained, the isolation of *S. aureus* from cutaneous lesion of a Hanuman Langur constitutes the first report from India.

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