ISOLATION OF PSEUDOMONAS AERUGINOSA FROM MANDIBULAR ABSCES IN A LAMB - A CASE REPORT

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P. aeruginosa has been isolated from meningitis, otitis, wound infection and pericarditis in man and from cases of mastitis, abscess in liver and spleen, metritis and abortion in cattle. In sheep the organism has been found associated with sheep fleece rot (whipping dermatitis) and mastitis (Blood and Radositius 1989). As far as could be ascertained its involvement in bone infection has not been reported so far.

This communication records mandibular abscess caused by P. aeruginosa in a five month old lamb brought to a private Veterinary clinic in Ahwas, Iran, on 22 November, 1991. The owner reported to have noticed a small swelling in the left jaw, approximately four weeks before, which enlarged gradually. On clinical examination, a painful extensive swelling of the left mandible resembling the lumpy jaw of cattle was observed. The skin over the swelling showed no abnormality and was without local adhesions to underneath bone tissue. Buccal cavity examination revealed dental caries of left premolar tooth. Because of anition the lamb had serious weightloss. The body temperture was 39.7°C.

About one ml. of pus was aspirared from the swollen mandible. The pus was thick creamy, greenish yellow in colour. A pure culture of P. aeruginosa was isolated from the pus. The culture was identified by conventional and biochemical tests. Stool, urine and specimens taken from buccal cavity were negative for P. aeruginosa isolation. A suspension of P. aeruginosa culture in normal saline at turbidity equal to Mac/Fariod and No.4 was used as an antigen to run tube agglutination test. The serum of the lamb had an antibody titer of 640.

In vitro drug suspeptibility test showed that the isolate was found susceptible to gentamicin, amikacin and carbenicilllin and resistant to kanamycin, tetracyclin, neomycin and nitrofurin.

Lamb was treated with 2 mg/kg i.m injection of gentamicin for 8 days. General symptoms of pain, anorexia, fever and depression subsided quickly during the period of treatment. The reduction in swelling was gradual and took approximately 2 months for recovery.

Although the lamb had completely recovered, the left mandible was larger in size compared to the right one.

The exact source of infection to the mandible bone could not be ascertained. Entrace of P. aeruginosa to mandible through damaged premolar tooth with eventual localisation inside the bone may be a possibility. However, the specimen collected from the left premolar tooth, at the time of clinical examination was found negative for P. aeruginosa isolation.

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