Rhinoscopic Evaluation of Nasal Tumour in Cattle

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Abstract

Cattle with nasal tumours were subjected to clinical, haematobiochemical and endoscopic examination. Clinical signs observed were nasal discharge, exophthalmus, exaggerated lung sounds, dyspnoea and epistaxis. Rhinoscopy revealed single large tumour or lobulated tumour obstructing the cavity either partially / completely while histopathology revealed multi nucleated tumour cells.

Key words: Cattle- Nasal tumour- Rhinoscopy.

Endoscopy procedure supports clinical examination in diagnosing diseases of gastrointestinal tract, urogenital tract and respiratory tract in small animals (Tams, 1999) and horses (Whitwell and Greet, 1984). Nasal cavity obstruction commonly occurs in cattle due to nasal granuloma, allergic condition or cystic enlargement of the ventral nasal conchae, granulomatous lesion caused by Rhinosporidium sp., and Schistosoma nasale. The present article describes about rhinoscopic evaluation of nasal tumour in cattle.

Materials and Methods

Cattle that were brought to the large ruminant clinic of Veterinary College and Research Institute, Namakkal with nasal discharge, cough / epistaxis and changes in respiratory characteristics were selected for the study. They were subjected to physical examination, haematobiochemical analysis and rhinoscopy. Endoscopic evaluation of respiratory tract was performed using Olympus™ [GIF V70] flexible video endoscope with a diameter of 4 mm and a usable length of 100 cm. Animals were sedated and restrained. The endoscope was inserted into the ventral nasal meatus and moved forward along the nasal septum up to the region of the pharynx and nasolarynx. The following parameters were evaluated: mucosal surface, colour, vascularization, oedema, quantity and nature of secretions. Mouth gag was applied to the animal and the endoscope was passed through the oral cavity to reach the pharynx for posterior rhinoscopic evaluation. Biopsy was taken from the tumour mass and was processed as per standard methods (Bancroft and Gamble, 2008).

Results and Discussion

Nasal discharge, dyspnoea, distress, breathing through mouth, incomplete obstruction with loud wheezing noise on inspiration, shaking of head, mucoid, serosanguineous or sanguino-purulent nasal discharge were noticed in cases of nasal tumours (Radostits et al., 2007). The clinical signs observed in the present study were similar to the above report. There was
significant neutrophilia and decrease in mean haemoglobin, PCV and RBC values. There is no significant difference in the mean values of AST, total protein and albumin. Endoscopy of the nasal cavity revealed tumours single or lobulated (Fig. 1). These tumours partially / completely blocked the nasal cavity. Biopsy of the tumours revealed large multi-nucleated tumour cells (Fig. 2). Posterior rhinoscopy was highly useful for the evaluation of the extent of obstruction of the nasal cavity.

Summary
Rhinoscopic evaluation of nasal tumour in cattle is placed on record.

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References


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Clinical Management of Polioencephalomalacia in Goats – A Retrospective Study of 18 Cases

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Abstract
Goats presented with neurological signs to the Medicine unit of Teaching Veterinary Clinical Complex, Veterinary College and Research Institute, Namakkal were screened out of which eighteen goats that were diagnosed as affected with polioencephalomalacia formed the study group. The clinical signs include staggering gait, incoordination, torticollis, nystagmus and apparent blindness. All the animals were normal in appetite. Blood and rumen fluid were collected and were analyzed. These cases were treated with thiamine (@ 10mg/kg intravenous), Dextrose normal saline (10ml/kg intravenous) and dexamethasone (0.5mg/kg IV) till recovery. The results and clinical signs were recorded.

Key words: PEM, Goat, thiamine, Poliocenphalomalacia

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