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SOME SURGICAL AFFECTIONS OF THE NICITITATING MEMBRANE IN CATTLE AND SHEEP

(With 5 Figures)

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بعض الأمراض الجراحية للجفن الرامش في الأبقار والأغنام

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لقد تم التدخل الجراحي لعلاج الخراجات تحت الملتحمة الخارجية للجفن الرامش في أربعة عجول والنمو شبيه الجلد على السطح الداخلي للجفن الرامش في غنمه. وبينما كان فتح وتنظيف الخراجات واستخدام المضادات الحيوية الموضعية على هيئة مرهم وقطره كافيا لعلاج ثلاث خراجات تحت ملتحمه الجفن الرامش، كان استئصال الجفن هو العلاج الجذري في حالة الخراج الذي أهمل علاجه حتى حدثت له مضاعفات شديدة. وبالرغم من أن النمو شبيه الجلد يمكن استئصاله جراحيا إذا كان صغير الحجم، إلا أنه قد يفضل الاستئصال الكامل للجفن الرامش إذا كان النمو شبيه الجلد كبير الحجم خاصة إذا كان على السطح الداخلي للجفن الرامش ومسببا لمضاعفات بالقرنية والملتحمة.

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SUMMARY

Subconjunctival abscesses on the palpebral surface of the nictitating membrane were dealt with in 4 cattle calves. An extensive dermoid was detected on the bulbar surface of the membrane in one sheep. While small dermoids on the palpebral surface of the nictitating membrane are excisable, the extensive ones especially those on the bulbar surface, and associated with keratitis, are most satisfactorily treated by total excision of the membrane. The nictitating membrane may also need to be excised in the severely complicated cases of subconjunctival abscesses.

INTRODUCTION

The nictitating membrane of large animals is frequently affected by neoplasms, protrusions, foreign bodies and inflammations. Squamous cell carcinoma, fibrosarcoma are the most frequent malignant tumours that affect the nictitating membrane (OEHAME and PRIER, 1974).

In cattle, conjunctival dermoids of the nictitating membrane are generally fleshy growths with large coarse hairs emanating from them (JENNINGS, 1984).

MATERIALS AND METHODS

The surgical affections of the nictitating membrane were dealt with in 4 cattle calves and one sheep. Evacuation of the subconjunctival abscesses on the palpebral aspect of the nictitating membrane in cattle calves was done after tranquillization of the animals with Rompun (Bayer) in a dose of 0.1 mg/Kg Bwt., intramuscularly. The evacuated abscesses were thoroughly cleaned and flushed with normal saline. Terramycin eye ointment and Chloramphenicol eye drops were applied immediately following surgery and for 4 times daily for 3 successive days.

The sheep were tranquillized with rompun (Bayer) in a dose rate of 0.2 mg/ Kg Bwt., intramuscularly. During total excision of the nictitating membrane, a local infiltration analgesia was performed at its base, where the membrane was grasped from its free margin with Allis forceps and was then protracted and everted. With the animals head firmly restrained, a small needle (22 Gauge) was inserted deeply in the fronix between the

nictitating membrane and the globe. Procaine hydrochloride (3 ml, 1% solution) was injected into the base of the membrane.

To excise the nictitating membrane, its base was clamped with two curved hemostates; one applied from each direction so that the tips of their prongs were slightly overlapped. The membrane was excised with curved scissors (GELATT, 1981). Terramycin eye ointment and Chloramphenicol eye drops were administered immediately following surgery and for 5 successive days.

RESULTS

Subconjunctival abscesses were diagnosed in 4 cattle calves. The animals were one to 4 months old. The abscesses were on the palpebral surface of the nictitating membrane. The size of the abscesses was large enough to obliterate most of the palpebral fissure. The palpebral conjunctiva was congested and severely tensed over the intact abscess with some haemorrhagic areas (Fig. 1). The bulbar conjunctiva was quite normal. The other ocular structures appeared clinically normal. After evacuation of the abscess (Fig. 2), the eye could see well, but the associated oedema and the inflammatory swelling of the membrane around the abscess subsided within 3 to 5 days postoperatively. Neglected case of subconjunctival abscess of the nictitating membrane had ulcerated unhealthy granulation tissue formation with pronounced inflammatory swelling of the membrane (Fig. 3). The bulbar conjunctiva of the nictitating membrane was also congested. Excision of the nictitating membrane was the radical treatment for such case.

A Dermoid, with large coarse hairs emanating from the cranial surface of the nictitating membrane, was detected in one sheep (Fig. 4). Keratitis and conjunctivitis were prominent. Excision of the nictitating membrane was indicated (Fig. 5). Keratitis and conjunctivitis subsided within 7 days postoperatively.

DISCUSSION

Although small neoplasms on the palpebral surface of the nictitating membrane are excisable, its excision may be necessary if the membrane is extensively involved (JENNINGS, 1984). Squamous cell carcinoma of the nictitating membrane may frequently recur after surgical removal and may invade the orbit by haematogenous routes (OEHME and PRIER, 1974).

While dermoids on the palpebral surface of the nictitating

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membrane may be excised, the extensive ones and those on the bulbar surface are most satisfactorily treated by removing the membrane (JENNINGS, 1984). Excision of a dermoid from the bulbar surface and leaving the operated side in contact with the already inflamed cornea and conjunctiva may be against the favour of the case. We have to emphasize that dermoids on the bulbar surface of the nictitating membrane, are to be expected, when keratitis and conjunctivitis are evident in sheep.

Although subconjunctival abscesses are usually seen on the lower eyelid, they have to be considered while dealing with the surgical affections of the nictitating membrane. The palpebral surface of nictitating membrane may be considered the more prone side for trauma and foreign body injuries. The neglected cases of subconjunctival abscesses of the nictitating membrane may aggravate the condition by further injuries and unhealthy granulation tissue formation. Excision of the nictitating membrane may be indicated as a radical treatment for such cases.

REFERENCES

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Fig. 1: Subconjunctival abscess on the palpebral surface of the nictitating membrane. The palpebral conjunctiva is congested and severely tensed over the intact abscess.



fig. 2: The case in Fig. (1) after evacuation of the abscess.

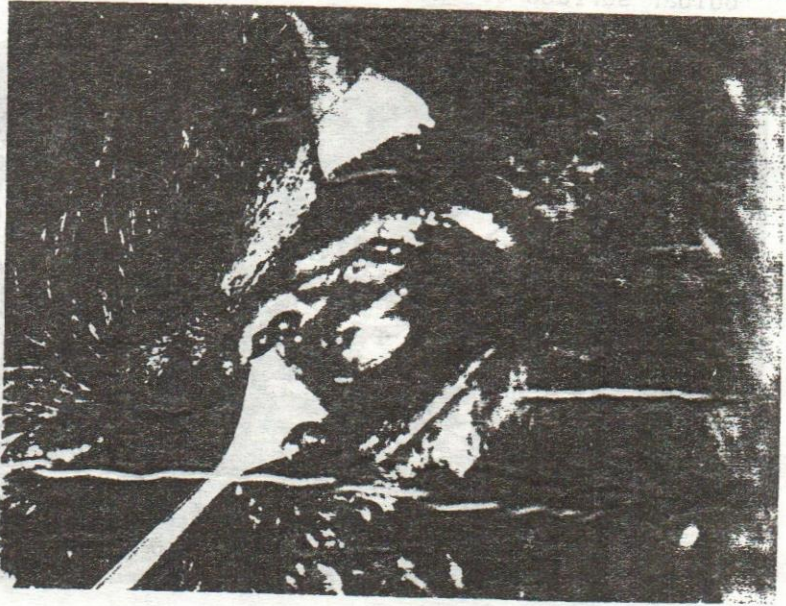
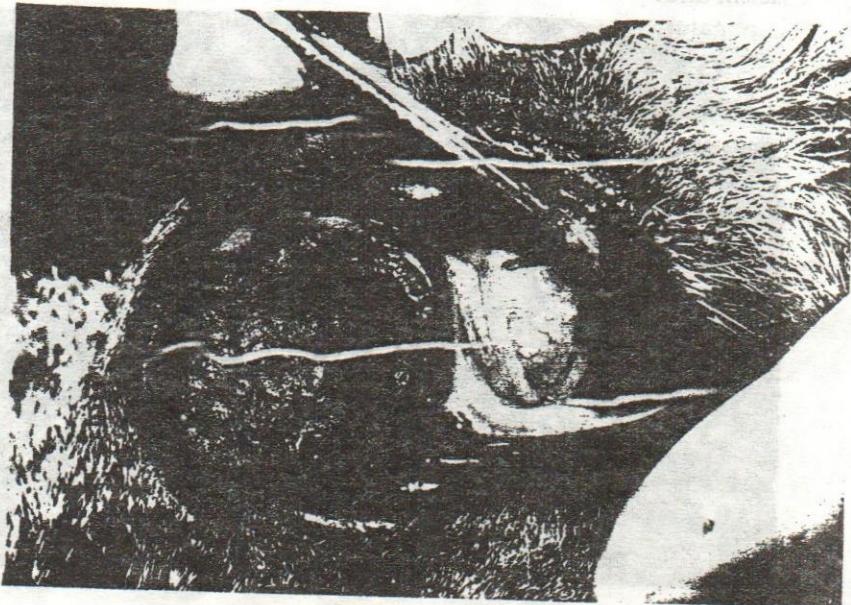


Fig. 3: A neglected case of subconjunctival abscess of the nictitating membrane.



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Fig. 4: A dermid with large coarse hairs emanating from the bulbar surface of the nictitating membrane in a sheep.

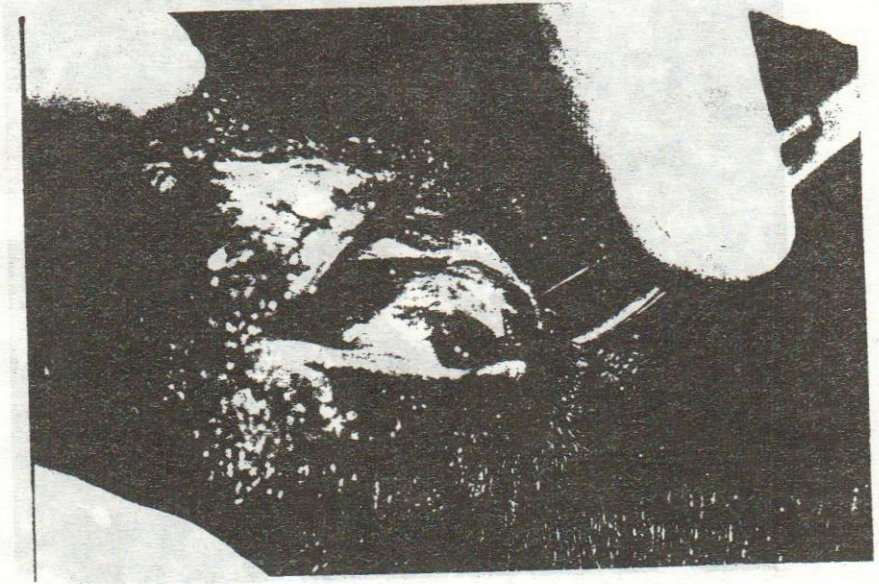


Fig. 5: The conjunctival dermid after excision of the nictitating membrane.

