

EQUINE PRACTICE — SURGERY

A case report involving the removal of sialoliths from the parotid duct of a six-year-old mare is presented. Clinical signs, diagnosis and surgical procedure are discussed. Photographs document the case report.

A CASE REPORT

Sialoliths in a Mare

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Introduction

Sialoliths are calcific concentrations in a salivary duct. Although reports on sialoliths in domestic animals are infrequent,^{1,2} a case of sialolithiasis in a donkey has recently been reported.³ The present case report documents a case of sialoliths in a mare.

Case Report

A 6-year-old mare of Arabian breed was presented to the College of Veterinary Medicine, University of Mosul, Iraq, with a swelling of the left cheek (Fig. 1) of 4 months' duration. The mass was present over the course of the parotid duct cranial to the masseter muscle. The swelling was hard and painless and had no firm attachment to

underlying bone. The freely movable mass yielded a grating sound on palpation. Examination of the buccal cavity revealed inflamed oral mucosa at the opening of the parotid duct. A tentative diagnosis of sialolith was made.

SURGICAL TECHNIQUE

The mare was restrained in lateral recumbency with the affected side uppermost. Surgery was performed under general anesthesia induced and maintained by intravenous (IV) administration of pentobarbital sodium.

A skin incision was made over the long axis of the mass. The wall of the parotid duct was then incised (Fig. 2) and 26 sialoliths of varying sizes (total weight — 33 gm) were removed (Fig. 3). The duct was sutured in a

Continued



Fig. 1 — A swelling of the left cheek of a six-year-old mare.

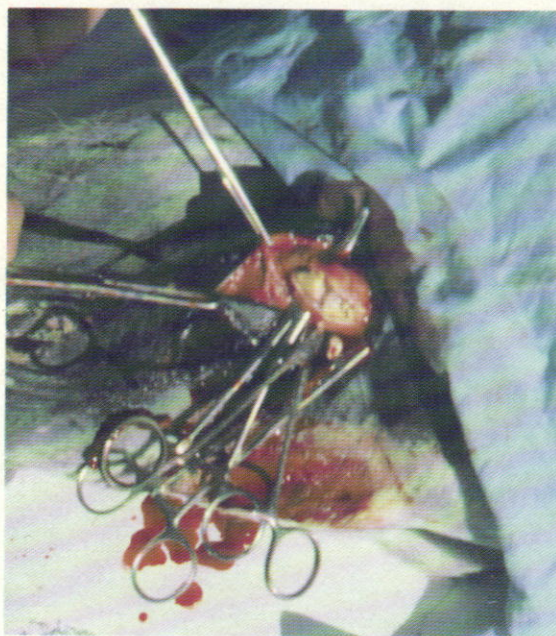


Fig. 2 — Sialoliths are evident in the parotid duct of the mare.

Fig. 3 — Twenty-six sialoliths of varying sizes were removed from the parotid duct of the mare.



continuous lock-stitch pattern using 2/0 catgut. The skin incision was closed with interrupted silk stitches.

Postoperatively, the animal received broad spectrum antibiotics for 5 days. The skin sutures were removed on postoperative Day 10. Recovery of the mare was uncomplicated.

Discussion

Sialolithiasis reportedly occurs more frequently in the equine species than in other species.^{1,3} One of the authors⁴ previously reported the removal of two calculi causing obstruction of Stenson's duct in a donkey. Sialoliths usually occur singly,¹ but in the present case, 26 calculi of varying sizes were removed from the parotid salivary duct.

In human beings, sialoliths develop more frequently in the submandibular gland and duct,⁵ whereas the parotid duct is reported to be the usual site in domestic animals.^{1,3} Although the origin of the sialoliths in the present case is not certain, chronic inflammation of the parotid gland and duct is believed to be responsible for the precipitation and deposition of salts around a bacterial nidus or inorganic particles.

The composition of the sialoliths was not determined in this case, but previous reports indicate that salivary calculi are composed primarily of calcium carbonate in domestic animals.^{1,3} In contrast, calculi in humans and other primates are composed primarily of calcium and magnesium phosphate.^{5,6} ■

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