

Kurze Mitteilungen / Short Communications

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Contribution to the Nasolacrimal Duct of Donkeys in Egypt

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With 3 figures

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Obstruction of the nasolacrimal duct and the subsequent ophthalmic lesions are frequently met with amongst donkeys in Egypt. With reference to the proper etiology, FAHMY (1972) had recorded nasolacrimal duct occlusion by filarial worms (*Onchocerca reticulata*) and FOUAD et al. (1973) had discovered a mycotic infection by *Histoplasma farciminosus* as the cause of granulomatous lesions related to the lacrimal apparatus.

In the present study, however, we are endeavoured to search about the possible presence of certain anatomical modifications which may predispose to the nasolacrimal duct obstruction in donkeys since nothing had been written on the anatomy of the nasolacrimal duct in such species of animals.

Material and Methods

A) Anatomical study: The nasolacrimal ducts of 10 adult donkey heads of both sexes were flushed with normal saline solution and filled via the nasal orifice with a 60% latex injection mass coloured with Carmine, as adopted by TOMPSETT/WAKELEY (1956). Then a 10% formalin solution was injected in the common carotid artery and the heads were placed in a mixture of 10% formalin, 2% phenol, 1% glycerin and 1% glacial acetic acid. After fixation dissection was carried out.

B) Dacryocystorhinography: Three fresh heads of adult donkeys and one head of adult horse were equally cut sagittally. Retrograde injection of barium sulphate 50% as a contrast material via the ostium nasolacrimale was performed by using special needle. The injection was continued very slowly until the injected suspension appeared at the puncta lacrimalia which then were occluded with cotton plug. Radiographs were taken as Fig. 2 and 3 show (KV 50, MA 100, S 1, FFA 80).

C) Histological study: Paraffin sections were cut at 6—8 μ m. and stained with Harris' haematoxilin and eosin, Weigert's elastic and Van Gieson's stain, and South Gate's muci-carmine method.

Results and Discussion

The two puncta lacrimalia are found immediately bulbar of the eyelid margins, approximately 5 mm. from the medial canthus. They are very fine