

Corneal occlusion or pseudopterygium

Esther van Praag, Ph.D.

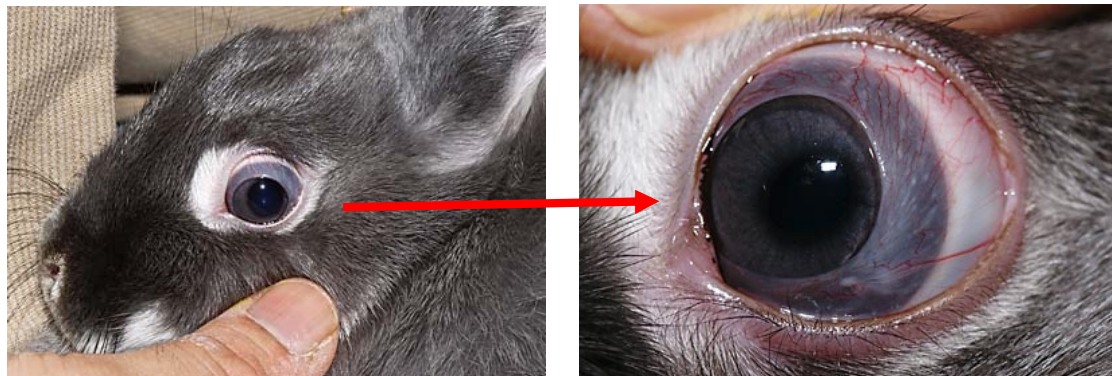
Warning: this file contains pictures that may be distressing for people.

A variety of names (pseudopterygium, precorneal membranous occlusion, aberrant conjunctival overgrowth, conjunctival centripetalization) have been given to this aberrant growth of the conjunctiva across the sclera, onto the cornea. Breed, age and sex of the rabbits seems to play a role, as it affects particularly male dwarfs, aged between 5 and 12 months age. One possible cause of pseudopterygium may be ultraviolet radiation.

Clinical signs

Pseudopterygium has been named "pseudo", as the overgrowing membrane is not really attached to the underlying cornea and, when removed, it usually retracts to its normal position. It can cover only a small part of the eye and appear like an annulus, or cover it almost entirely, leading to blindness. The condition can be unilateral or affect both eyes. Often the condition is accompanied by pain.

Arnbjær has published a paper about 2 rabbit cases. In the first case, the conjunctival membrane was detached with a blunt instrument from the underlying cornea, followed by injection of methylprednisolone acetate in the subconjunctival membrane. The eye treated with steroid/antibiotic eye drops during 3 weeks. In the second case, the only treatment was topical antibiotics after the detachment of the membrane, and it reappeared within



VEIN (Veterinary Exotic Information Network) System, Copyright © Akira Yamanouchi

Pseudopterygium, showing the membrane growing over the cornea

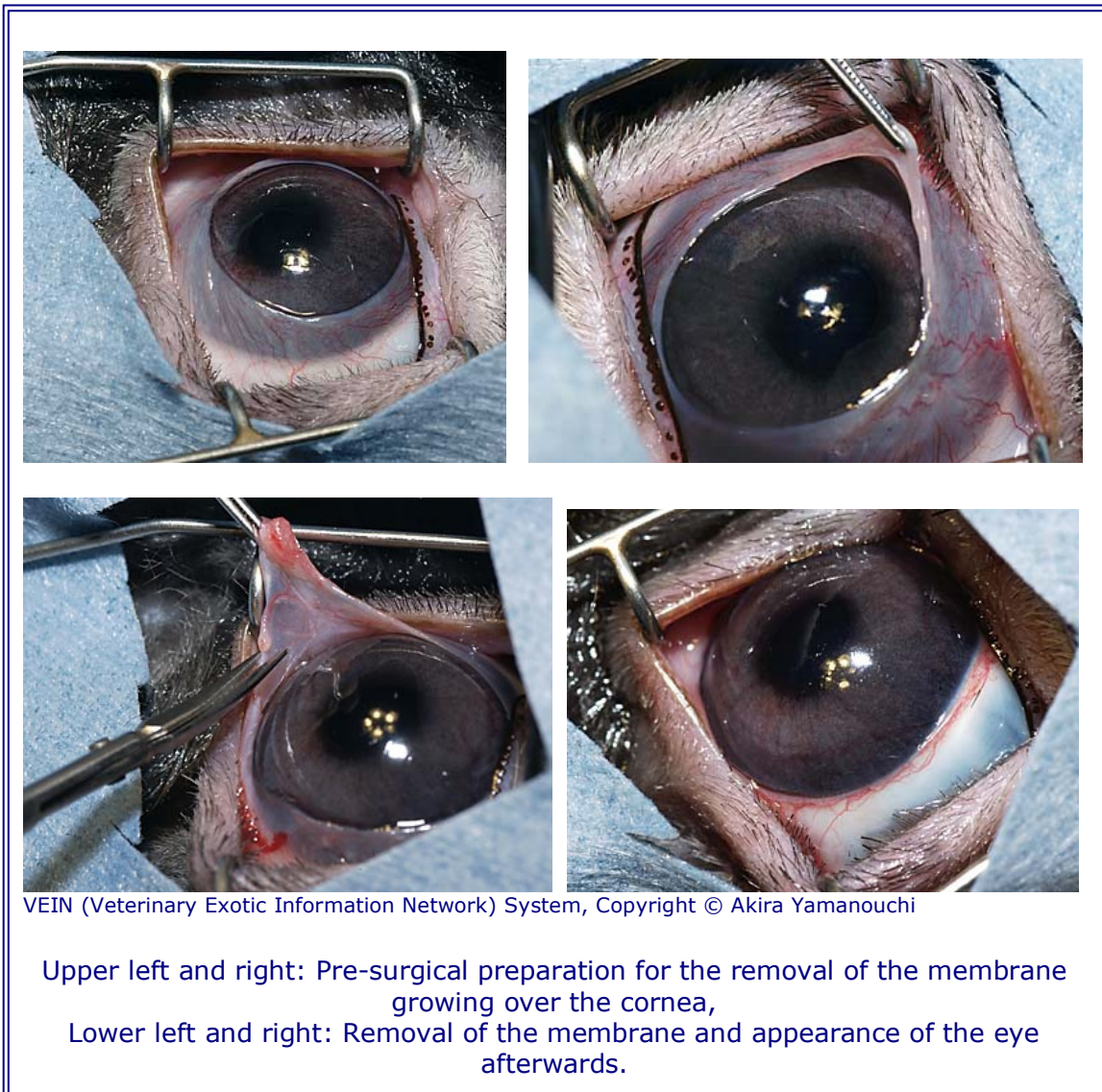


weeks.

Treatment

Surgical removal of the overgrown conjunctiva leads to a recurrent situation. A more successful treatment seems to be the suturation of the fold back onto the eyelid (for instance with resorbable Dexon or Vicryl sutures 5.0 or 6.0), followed by the topical use of cyclosporine 0,2% and corticosteroids (e.g. dexamethasone 0.1%) after surgery.

Unfortunately, this condition is very poorly described in veterinary literature.



Acknowledgement

Thanks are due to Akira Yamanouchi, for the permission to use the pictures from VEIN (Veterinary Exotic Information Network, <http://vein.ne.jp/>).



Further information

1. Arnbjerg, J. Pseudopterygium in a pygmy rabbit. *Vet. Med. Small Anim. Clin.* 74, 737-738 (1979).
2. Delaney, K.H. Diagnostic exercise: Apparent corneal occlusion in a New Zealand white rabbit. *Contemp. Top. Lab. Anim. Sci.* 34, 76-77 (1995).
3. DuPont, C., Carrier, M. & Gauvin, J. Bilateral precorneal membranous occlusion in a dwarf rabbit. *J. Small Exotic Anim. Med.* 3, 41-44 (1995).
4. Fehr, M. Eye anomalies in dwarf rabbits. [German]. *Kleintierpraxis* 29, 129-130, 132 (1984).
5. Matros, L.E., Ansari, M.M. & Van Pelt, C.S. Eye anomaly in a dwarf rabbit. *Avian Exotic Pract.* 3, 13-14 (1986).
6. Roze, M., Ridings, B. & Lagadic, M. Comparative morphology of epicorneal conjunctival membranes in rabbits and human pterygium. *Vet. Ophthalmol.* 4, 171-174 (2001).
7. Schoofs, S. & Hanssen, P. Epicorneal conjunctival membrane in the rabbit: a clinical case and surgical therapy. [Dutch]. *Vlaams Diergeneeskundig Tijdschrift* 67, 344-346 (1998).
8. Wagner, F., Heider, H.J., Gorig, C. & Fehr, M. Ophthalmic diseases in dwarf rabbits. Part 1: eye examination, anatomy, diseases of the eyelids, the conjunctiva and of the nasolacrimal duct. [German]. *Tierarztl. Prax.* 26, 205-210 (1998).

The information and pictures on these pages may not be reproduced, or republished on another webpage, website, or elsewhere.

MAI 2003

