

An eye-opening case:

South American camelids are new hosts for
Parafilaria bovicola

-

Intraocular infestation in an alpaca

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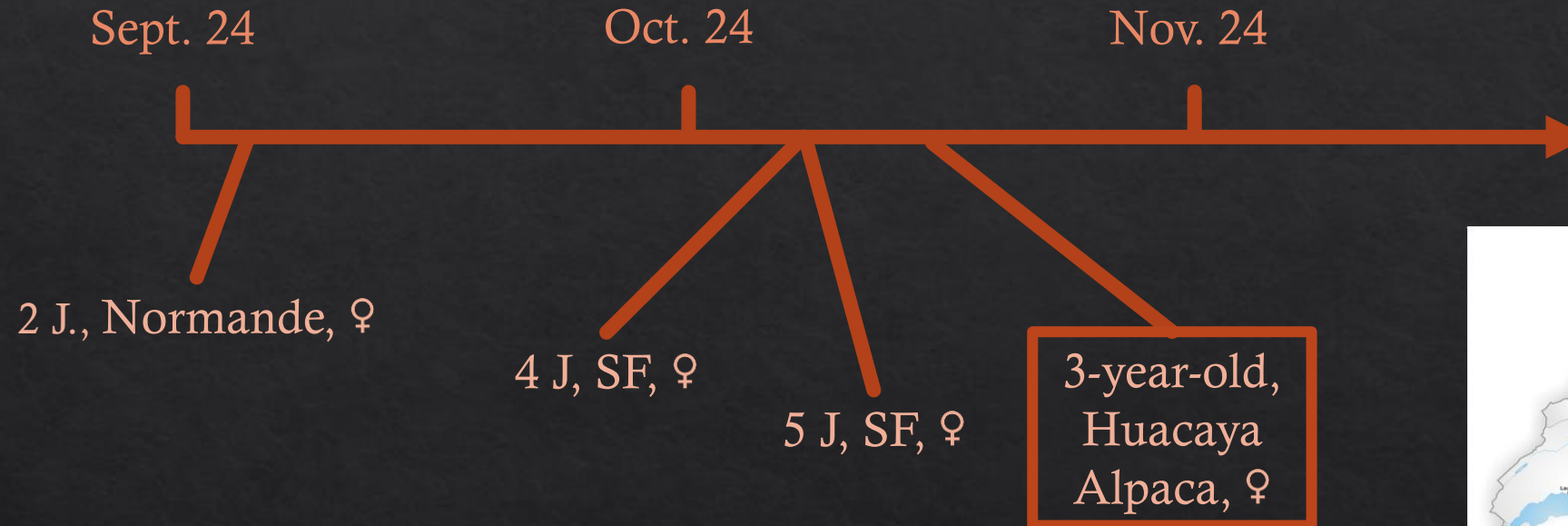
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Medical history

- ◇ Pet herd with 4 llamas and 4 alpacas
- ◇ A month ago, cloudy right eye, suspicion of *Mycoplasma conjunctivae* infection
- ◇ Treatment with tetracycline eye ointment, systemic dexamethasone and ivermectin
- ◇ Reduction of clinical signs during treatment, followed by a relapse
- ◇ Living worm was seen after two weeks
- ◇ Repeated treatment with ivermectin and tetracycline eye ointment
- ◇ No signs of improvement - the worm remains visible.

Autumn 2024



→ Living worm in the eye



In Anlehnung an Bundesamt für Landestopografie
swisstopo. (o. J.). Karte der Schweiz [Karte].
<https://www.swisstopo.admin>

Clinical examination

- ◇ RR: 24/min; HR: 64/min; Temperature: 38.1°C
- ◇ Obesity
- ◇ Motile, moving worm in the front right eye chamber
- ◇ Ocular examination of the right eye:
 - ◇ Menace response positive
 - ◇ neuro-ophthalmic examination normal
 - ◇ Approximately 13 mm long ,white, worm moving inside the anterior chamber
 - ◇ No signs of uveal reaction.

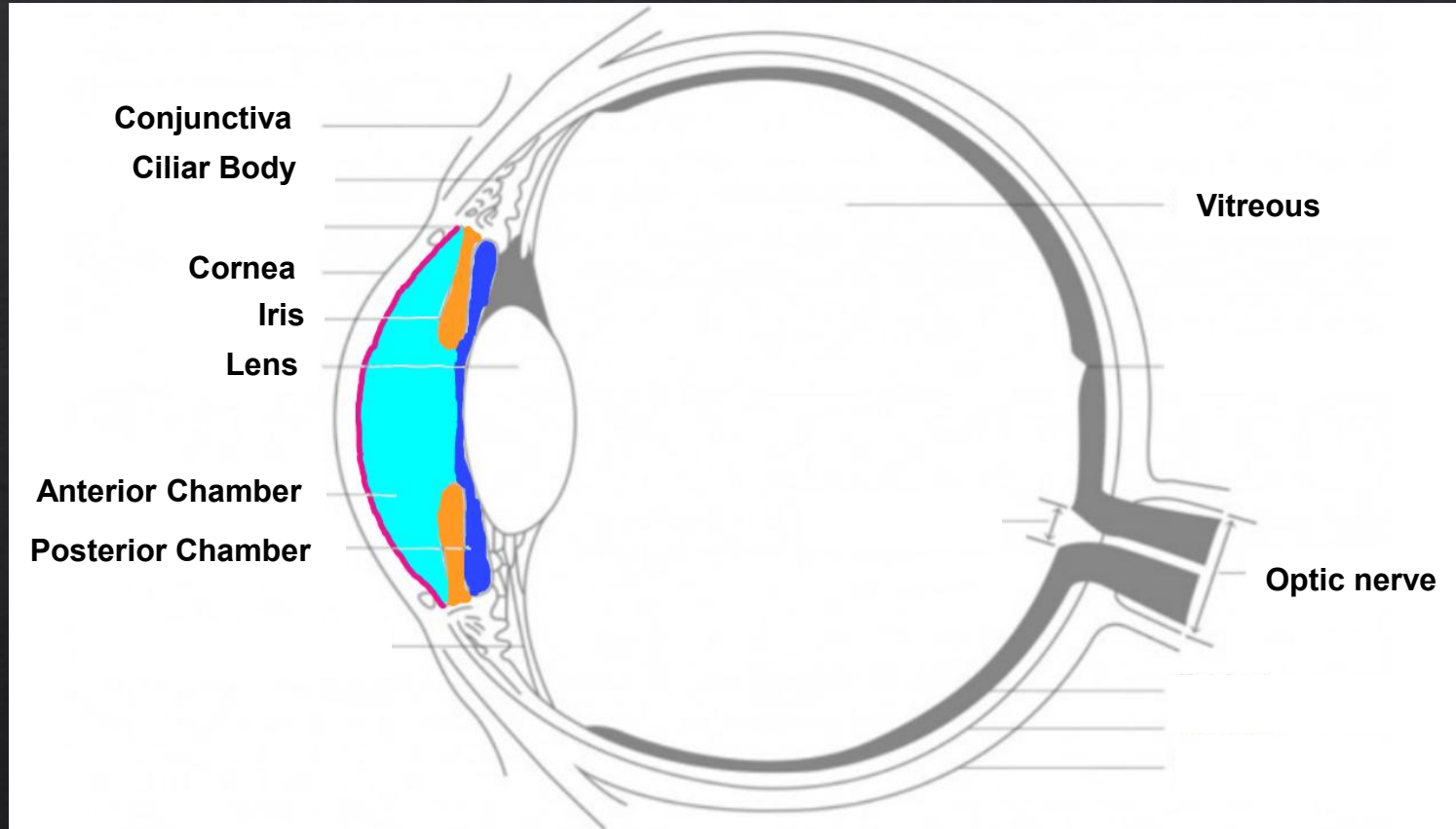
Differential Diagnosis

- ◇ *Thelazia* spp.
- ◇ *Setaria* spp.
- ◇ *Parafilaria bovicola* infestation (Shukla, A.K. et al., 2024)

Treatment



Anatomy of the Eye

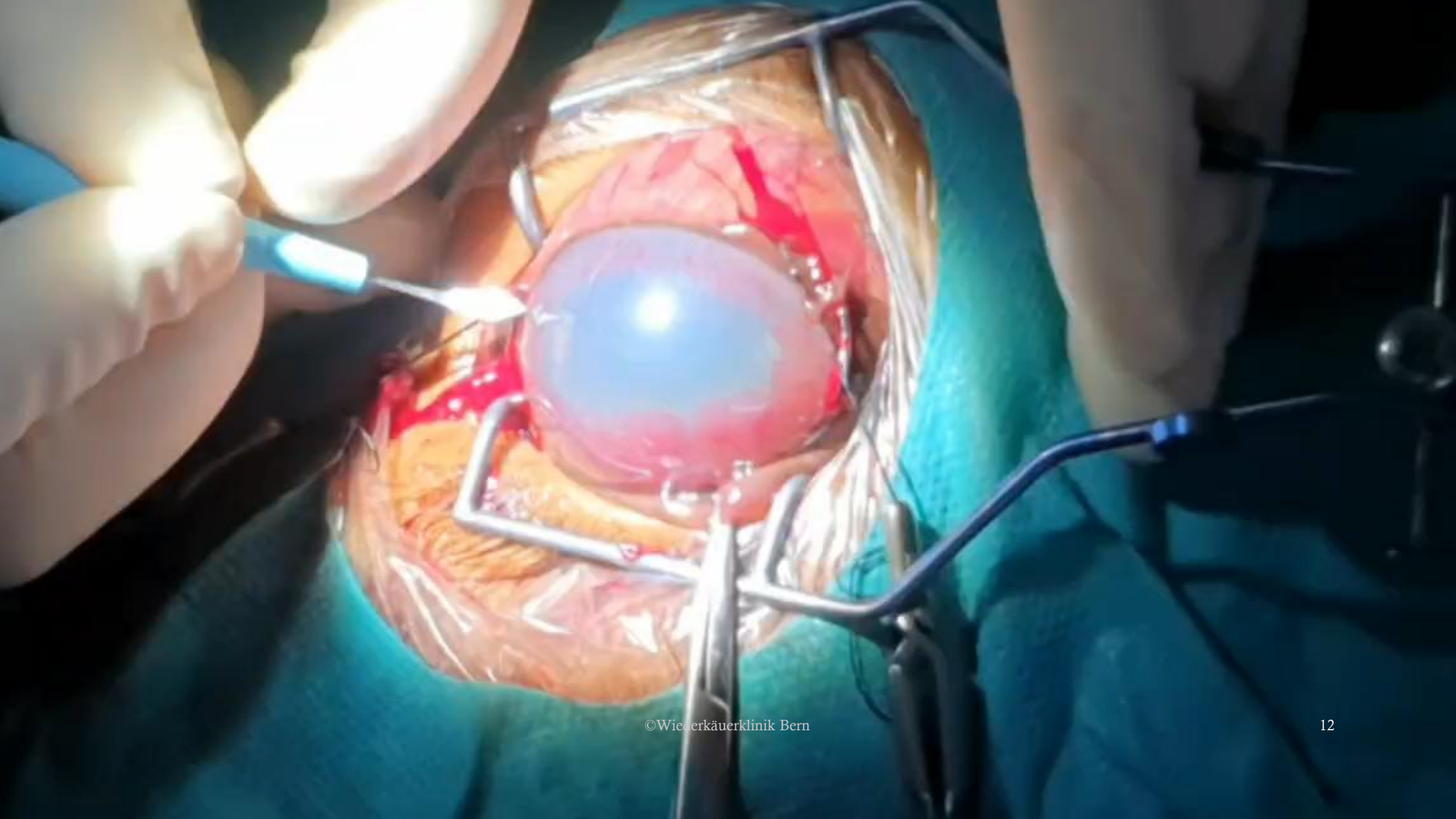


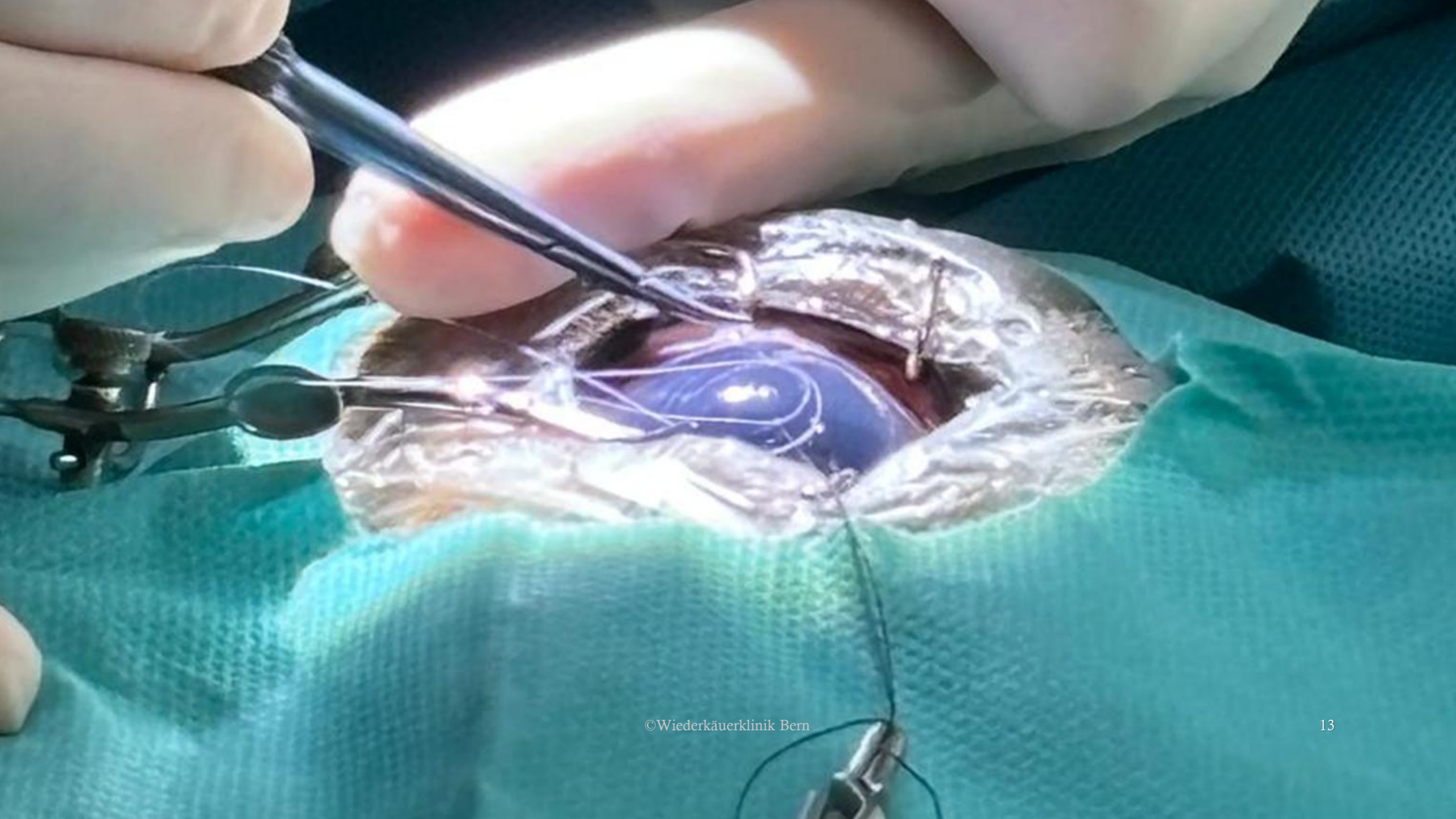
In Anlehnung an Bestandteile und Aufbau des Auges – Teil 2 › Gesundheitsoptik. (n.d.). Retrieved May 13, 2025, from <https://www.gesundheitsoptik.ch/de/news-detailseite/bestandteile-und-aufbau-des-auges-teil-2/>



Surgical Removal of the Parasite with Passive Outflow







Post-operative management

- ◇ Systemically
 - ◇ Flunixin 1.1mg/kg i.v. SID 2 days
 - ◇ Oxytetracycline 5mg/kg i.v. BID 3 days post-op
- ◇ Local
 - ◇ Atropine 0.5%: one drop after surgery to prevent myosis and posterior synechia
 - ◇ Oxytetracycline eye ointment TID
- ◇ Worm → Institute of Parasitology

Parasitology

◈ Worm identification



◈ PCR and sequencing



Parafilaria bovicola



Rinderskript (o. J.). Parafilariose. Abgerufen am 13. Mai 2025, von <http://www.rinderskript.net/skripten/b1-11.html>

- ◇ Transmission through *Musca autumnalis*
- ◇ Subcutaneous migrations
- ◇ Repellents!!



Musca autumnalis - Observation.org. (n.d.). Retrieved July 21, 2025, from <https://observation.org/species/18848/>



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Long Term...



Take Home Messages

- ◇ First report of *Clusia bovicola* infestation in SAC
- ◇ First report of *Clusia bovicola* in SAC
- ◇ Incubation period 1-2 weeks
- ◇ Affects the eye
- ◇ Dead parasites can be surgically removed
- ◇ Only live parasites can be surgically removed
- ◇ Early surgical intervention may preserve vision and prevent blindness

WATCH OUT
for worms in the eye!!!



Thank you for your attention!

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Thank you for your attention!