



# CLINICAL & ULTRASONOGRAPHIC FINDINGS OF SOME OCULAR CONDITIONS IN SHEEP, GOATS & CAMELS



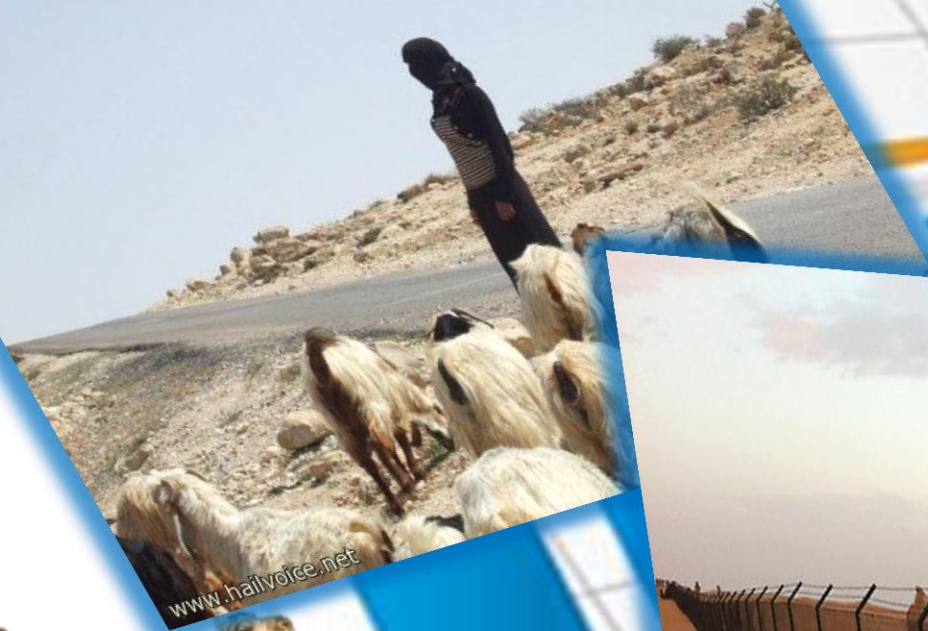
**EL-TOOKHY, OMAR**  
CAIRO UNIVERSITY, EGYPT  
2015



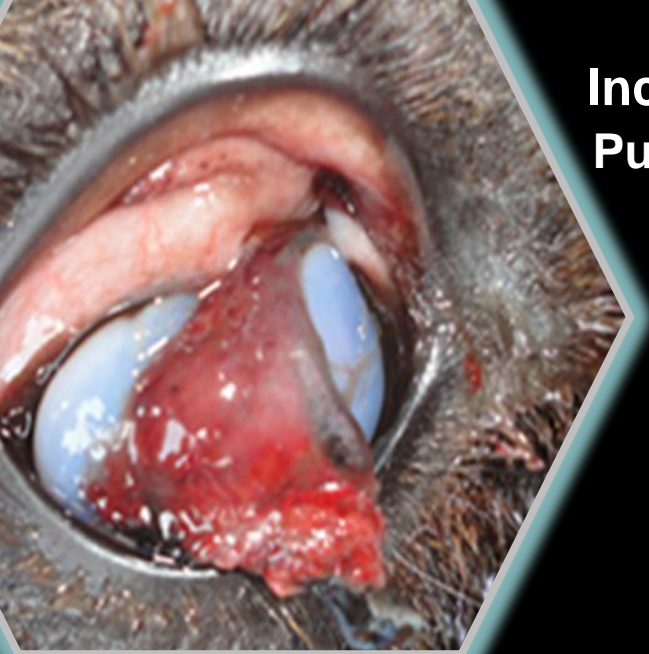


As many other food-producing animals *Ocular diseases* play a significant role in economic losses

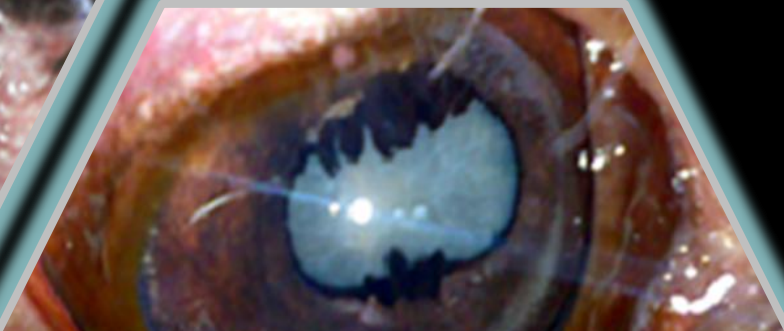
Ultrasonography is done routinely for companion animals but *not with herds of sheep, goats or camels*



Incidence of ocular problems is not exactly known  
Published reports are from slaughter-house surveys



0%  
?



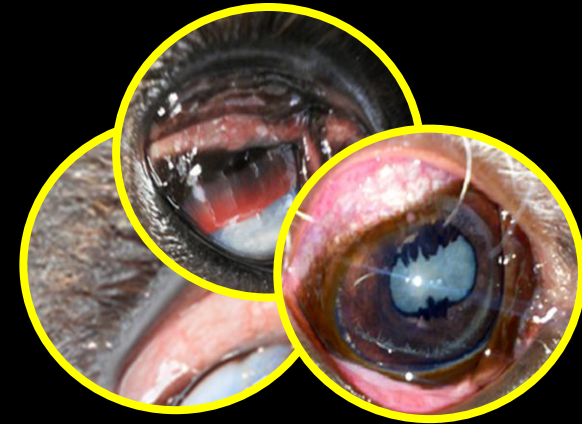
# 1- Animals



# 2- Place



# 3-Complaints



# 4- Steps

Case history

Regular ophthalmic exam

Ultrasonographic exam

B-mode/7.5 MHz sector probe, depth of 4–6 cm

findings classified / location

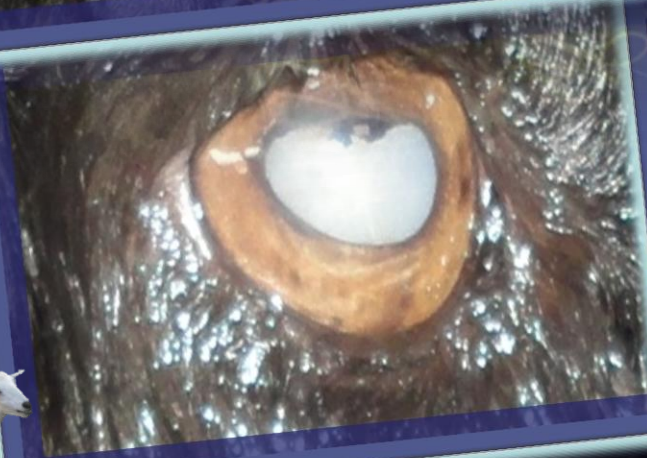


# Restraining



Sedation was achieved by IV injection 0.2 mg/Kg Bomazine 10%

**(i) OCULAR  
CONDITIONS IN  
SHEEP, GOATS**



# Normal



ALOKA  
22-05-11  
08:32:45

ID:

FOCUS  
1234 B

- (C) Cornea
- (I) Iris
- (AC) Anterior Chamber
- (ALC) Anterior Lens Capsule
- (CB) Ciliary Body
- (PLC) Posterior Lens Capsule
- (V) Vitreous



7.5M X1.7 09011-1372.6

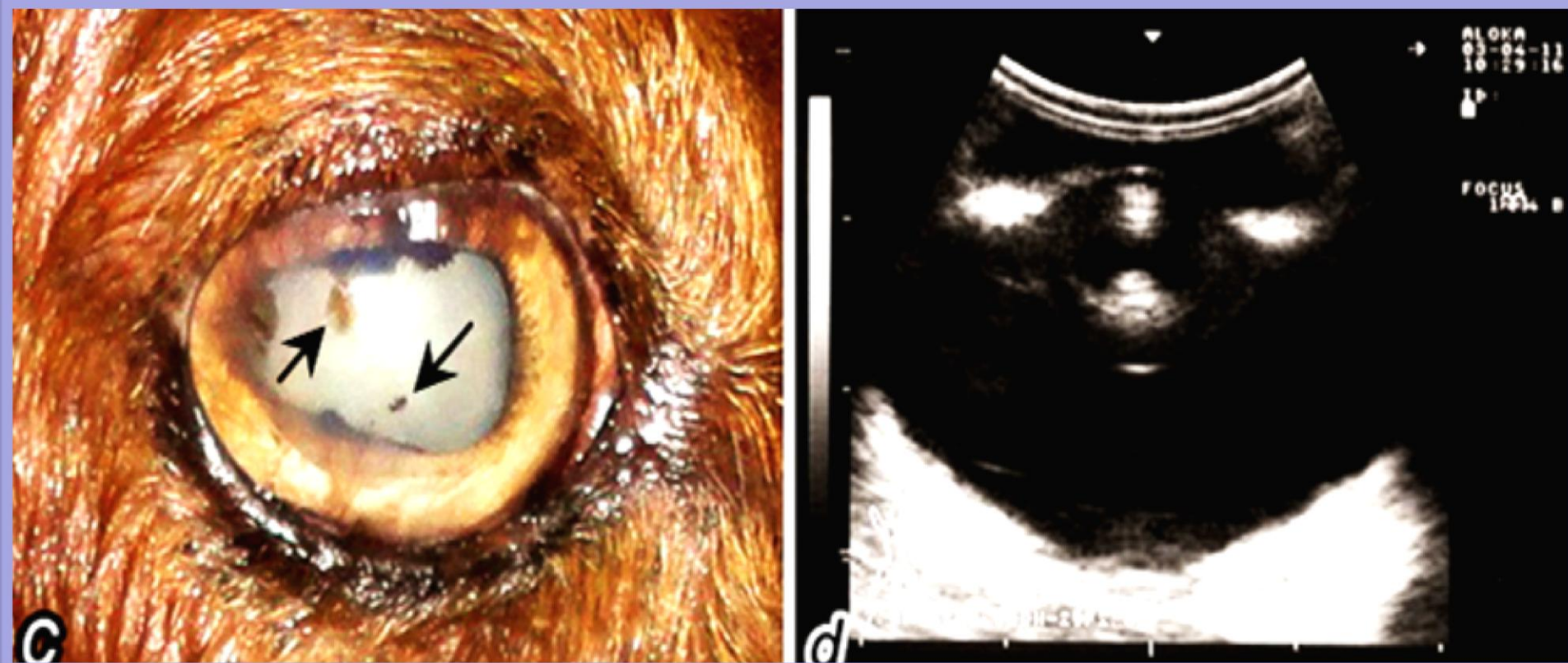


# Cornea / Conjunctiva



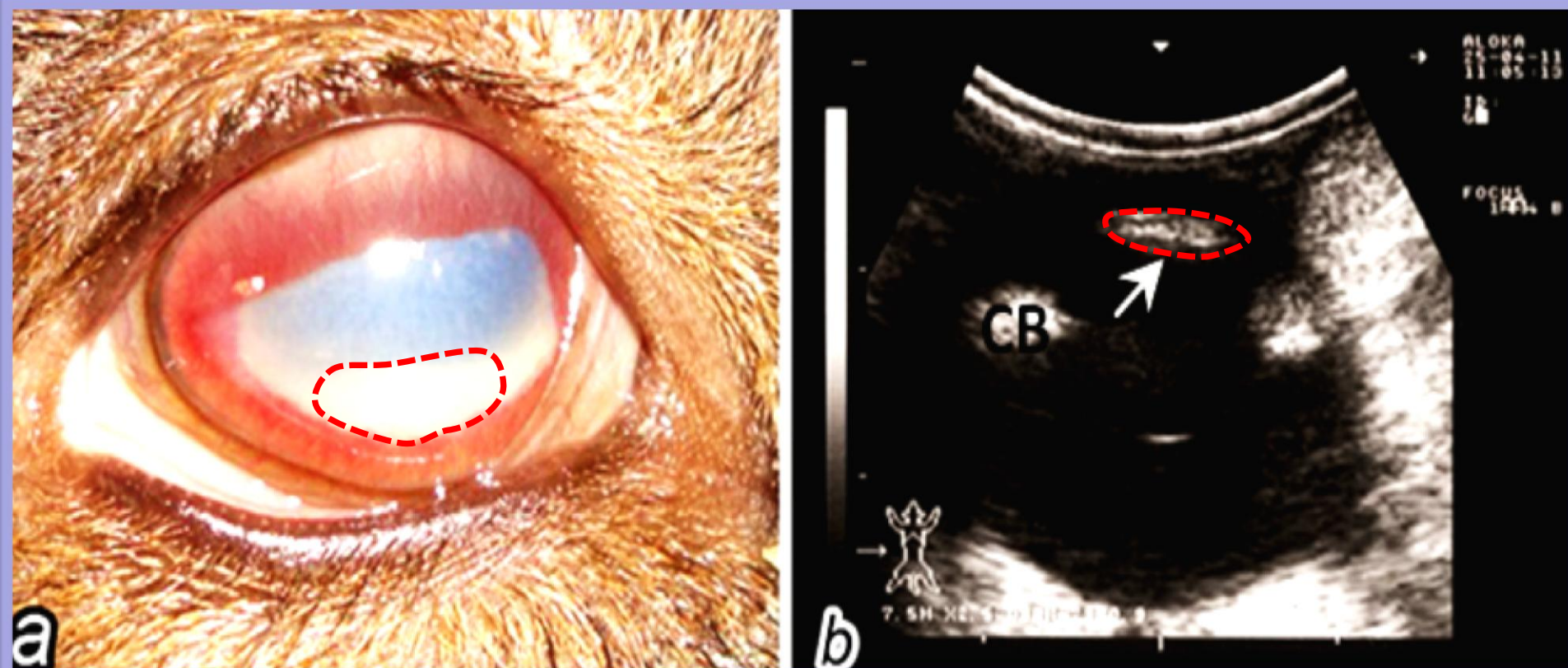
**Fig: e-sever conjunctivitis, corneal stromal abscess, f-iridocyclitis manifested by hyperechoic iris (IR) and ciliary body**

# Post. Cornea / Iris / Lens



**Fig: , c- clear corneal tissue with dilated pupil, corneal pigmentation (arrows) as a result of anterior synechia and cataractous lens, d-slight capsular cataract with cortical involvement,**

# Anterior Chamber



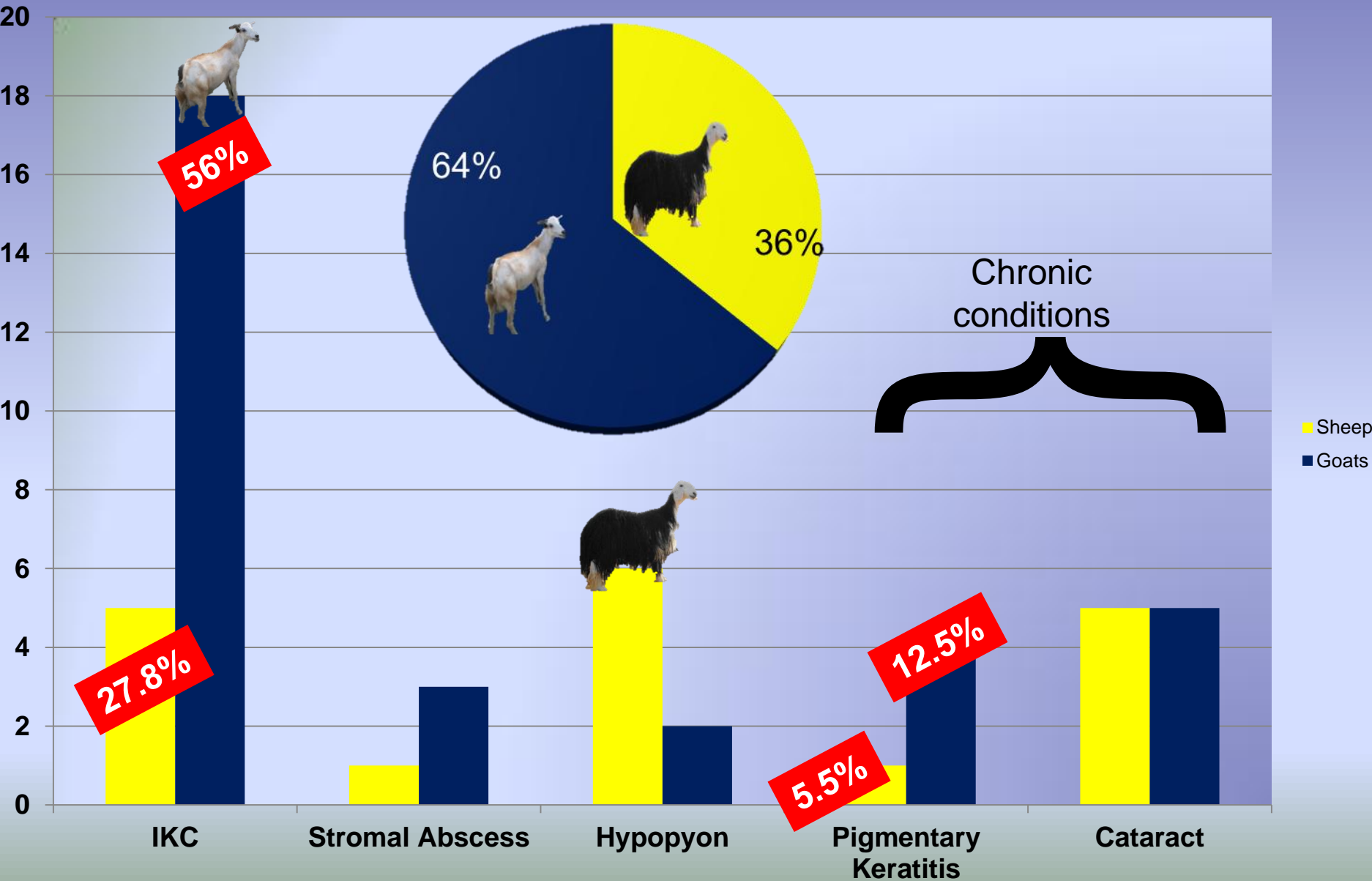
**Fig: a-conjunctival injection with corneal opacity and anterior chamber hypopyon, b-hypopyon seen as hyperechoic shadow in the anterior chamber (arrow) with thickening of the ciliary body (CB) and increased in its echogenicity**

# Lens



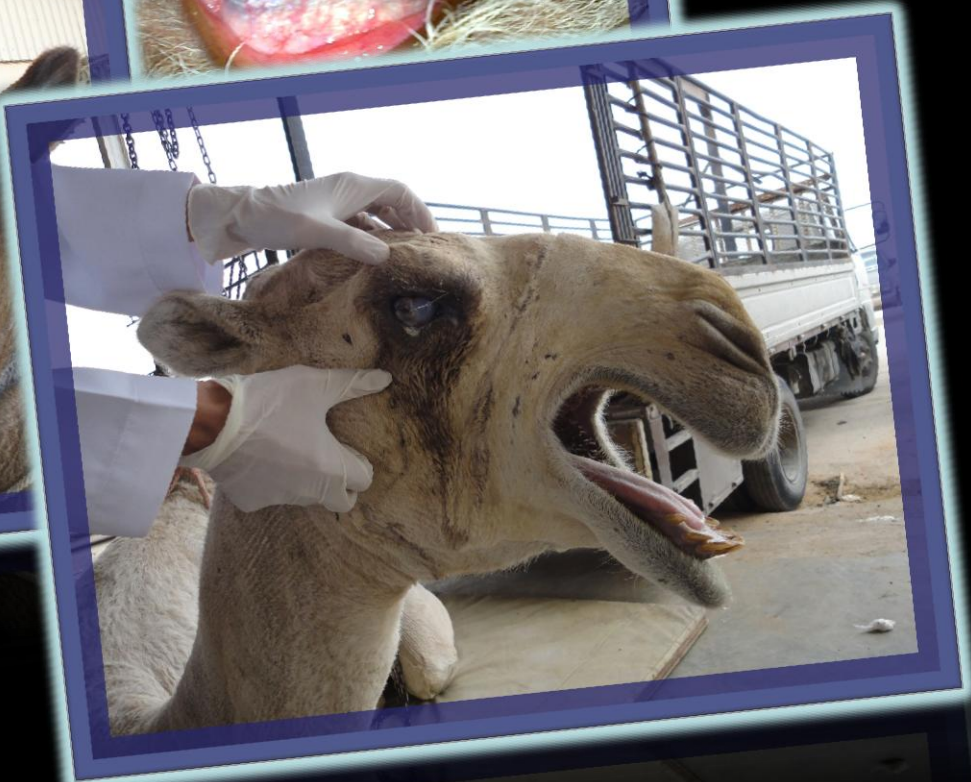
**Fig: e-mature cataract, f-capsular and cortical cataract with slight nuclear involvement.**

# Graph(1): Incidence of different ocular affections in examined animals

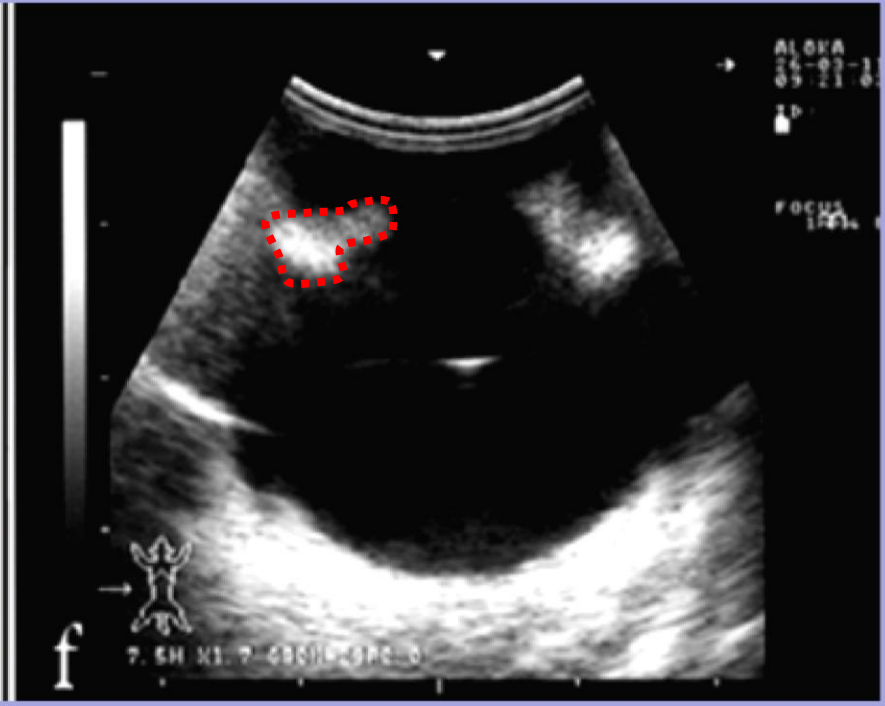
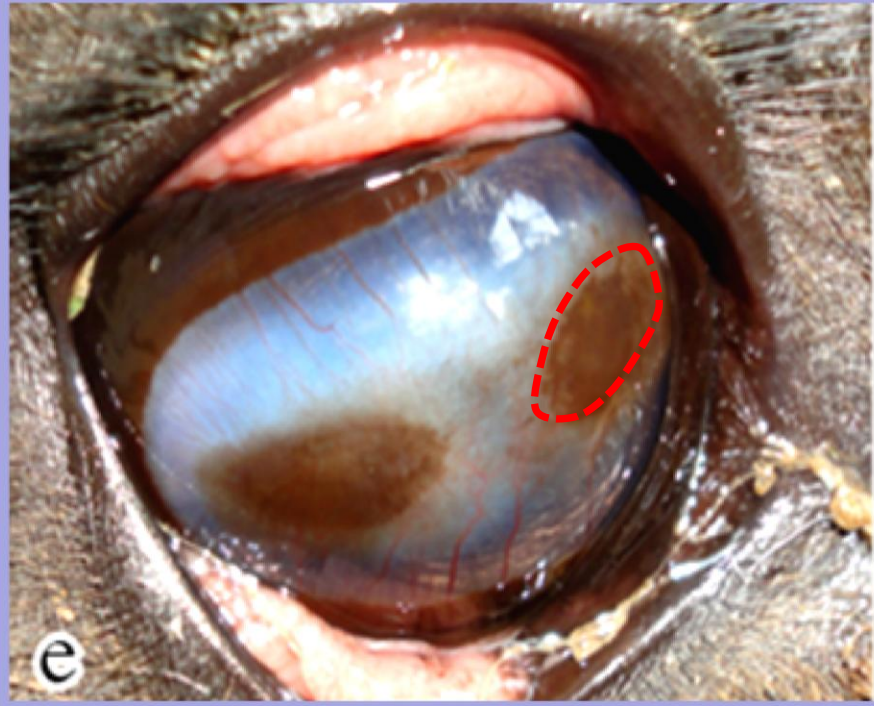


IKC and hypopyon are the highest two conditions seen in Acute cases  
 Cataract is the highest condition seen in chronic cases in both sheep and goats

# (ii) OCULAR CONDITIONS IN CAMELS



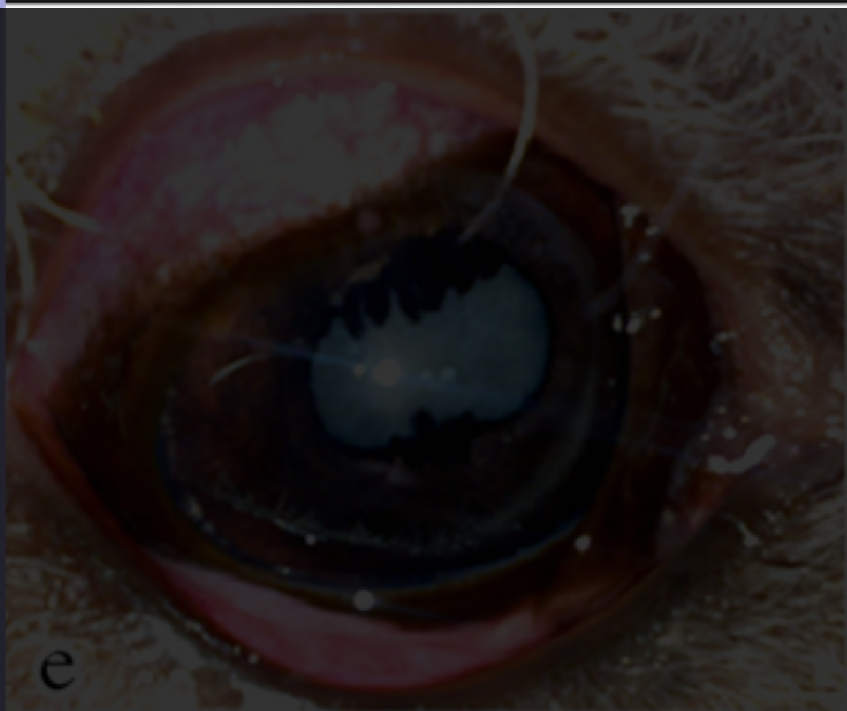
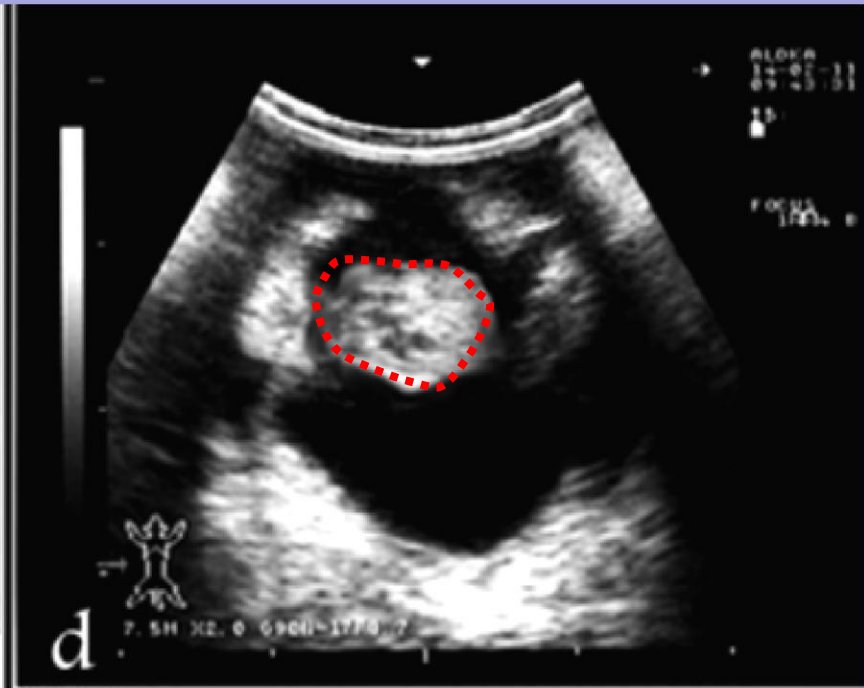
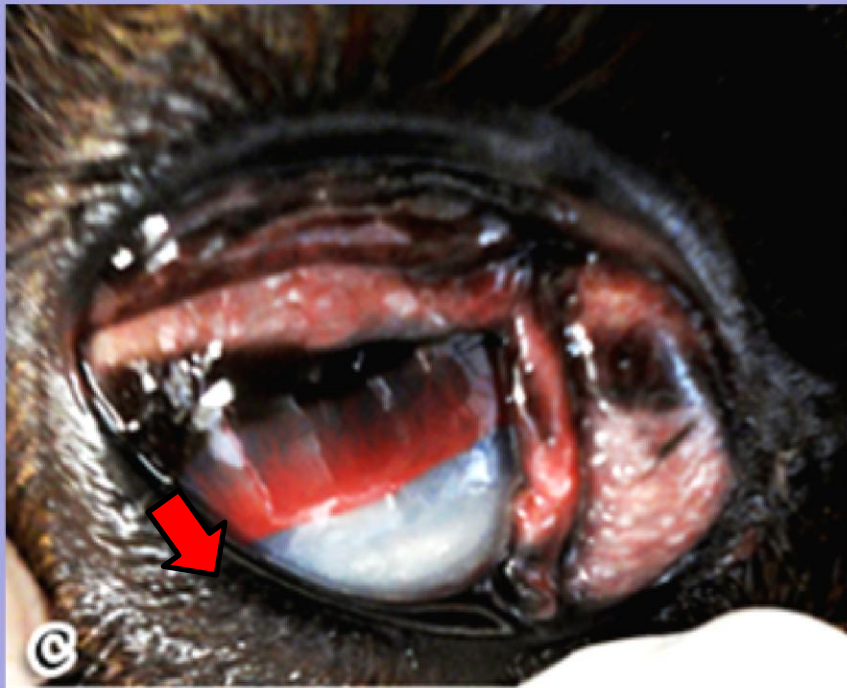
Cornea / Conjunctiva / Iris / CB



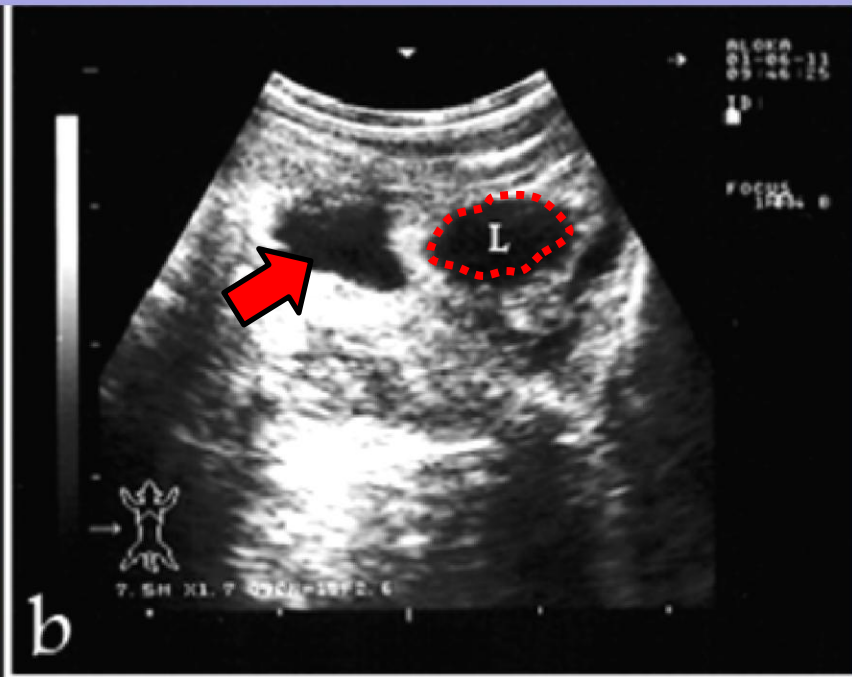
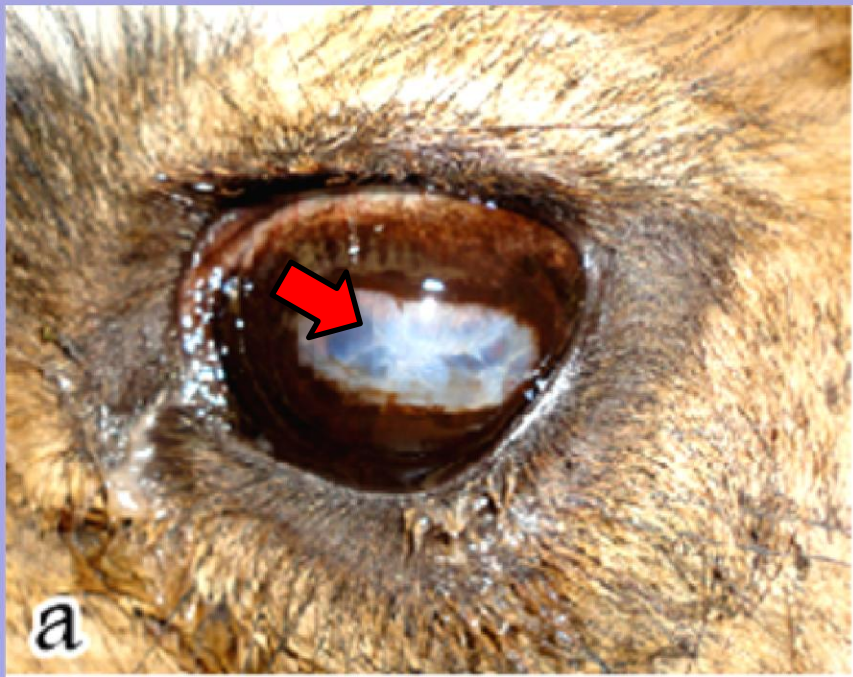




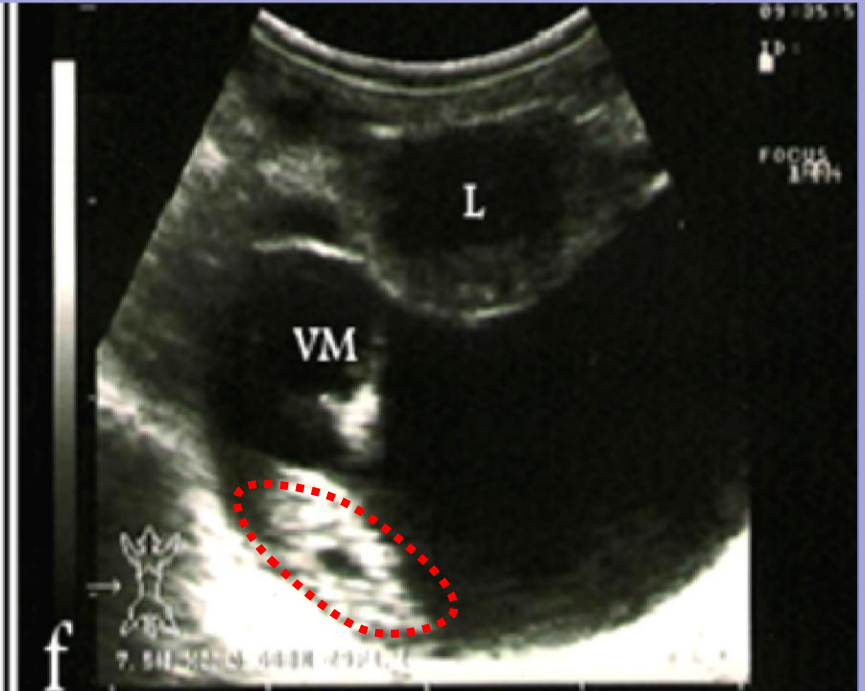
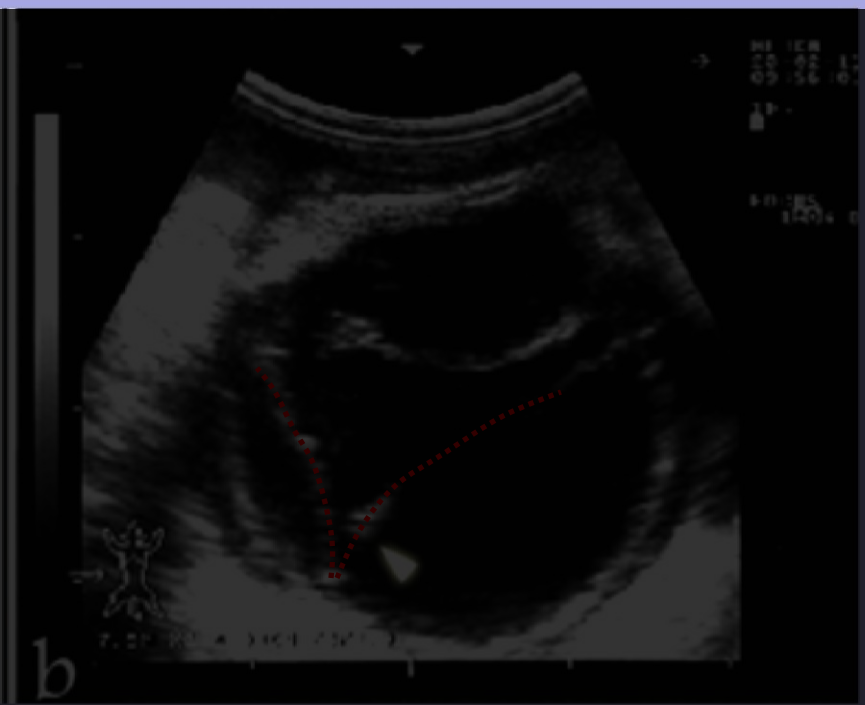
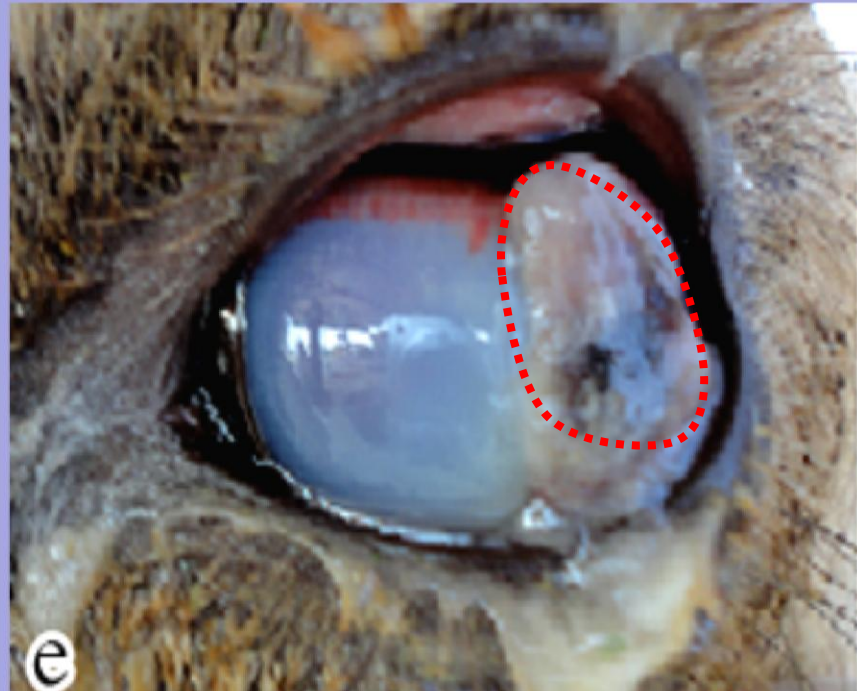
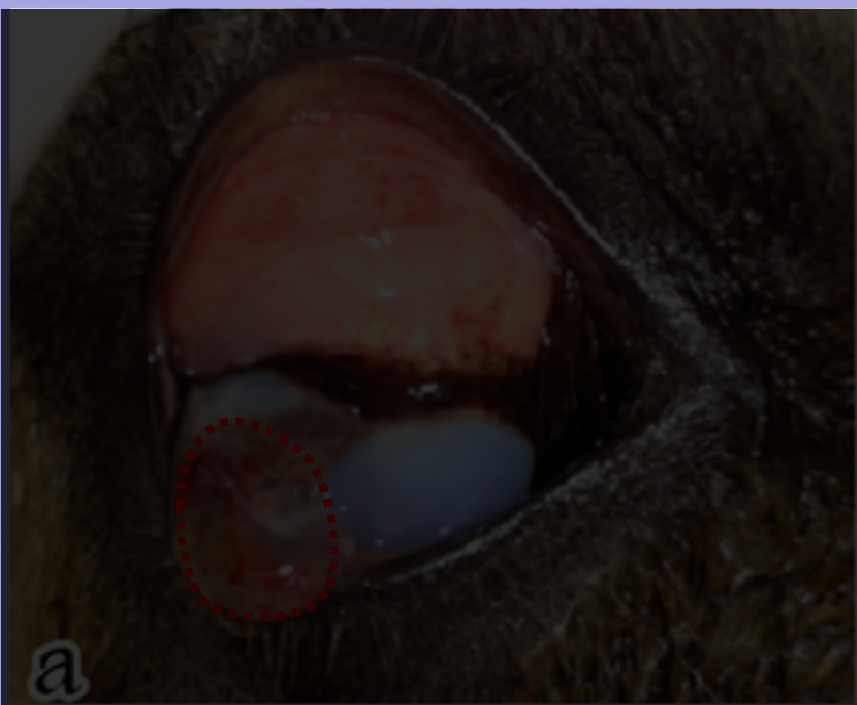
Lens



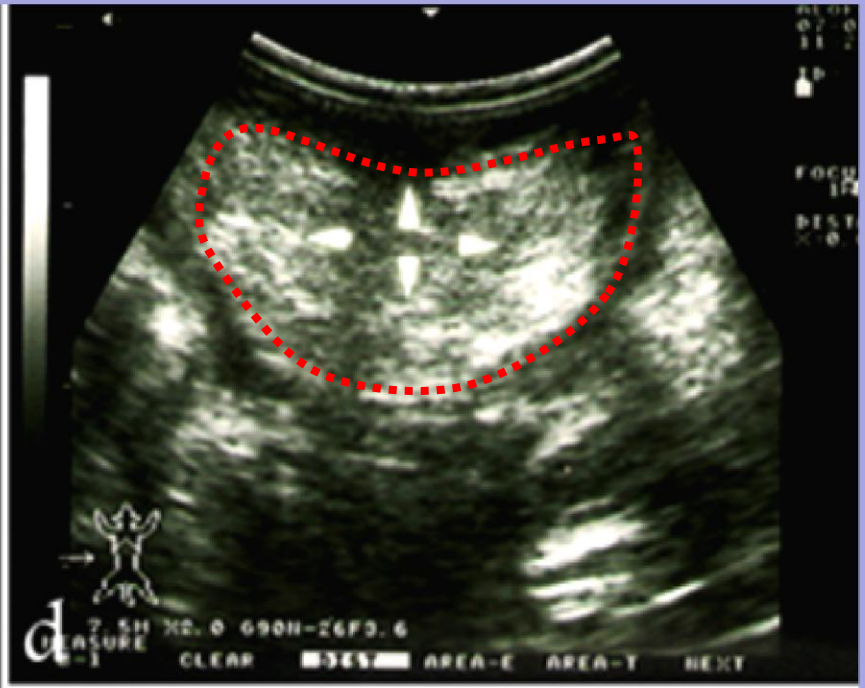
Anterior chamber (Fibrin / Glaucoma)



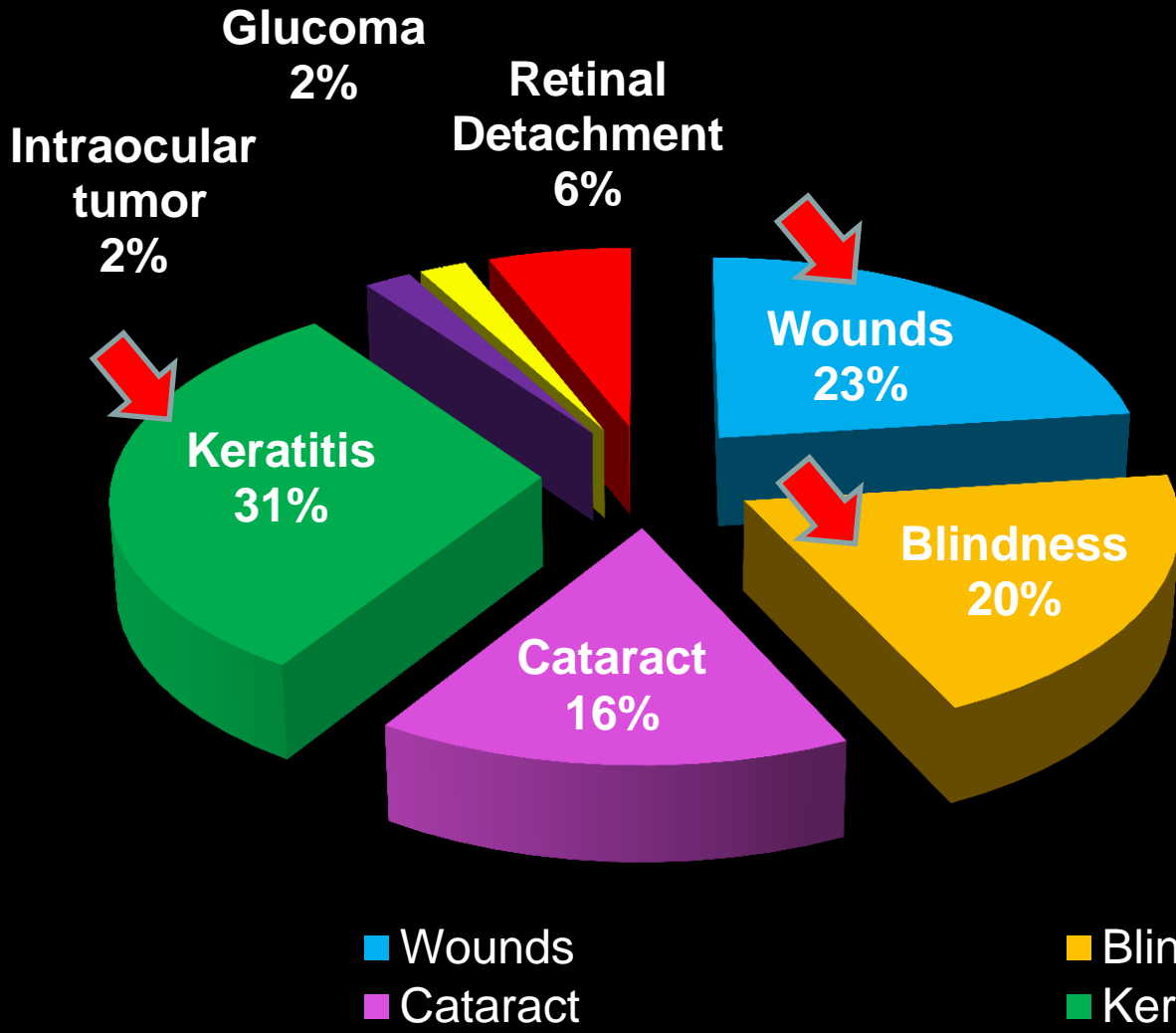
# Vitreous (Prolapse, Membrane, R. Detach)



# Vitreous (hemorrhage), Blindness



Although dromedaries are resistant to several cattle diseases, ocular problems still can occur and possibly subside or exaggerate long before being noticed or treated.



Ocular affection		No / (%)
I. Anterior segment (n=37, 72.5%)	<b>1. Keratitis:</b>	<b>16 (31%)</b>
	mild	8
	moderate	5
	severe	3
	<b>2. Penet C. wounds</b>	<b>12 (23%)</b>
	<b>3. Cataract:</b>	<b>8 (16%)</b>
	unilateral	3
bilateral	5	
<b>4. Glaucoma</b>	<b>1 (2%)</b>	
II. Posterior segment (n=14, 27.5%)	<b>1. Intraocular tumor</b>	<b>1 (2%)</b>
	<b>2. Retinal Detach</b>	<b>3 (6%)</b>
	<b>3. Blindness:</b>	<b>10 (20%)</b>
	unilateral	2
	bilateral	8

**ocular affections seen in the dromedary camels**



**OMICS** International  
Global Veterinary Summit  
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Florida, USA

# Thank you

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Although dromedaries are resistant to several cattle diseases, ocular problems still can occur and possibly subside or exaggerate long before being noticed or treated.

Anterior segment affections are higher than the posterior segment affections.

Keratitis is the highest condition seen.

The highest Posterior segment affections is blindness.

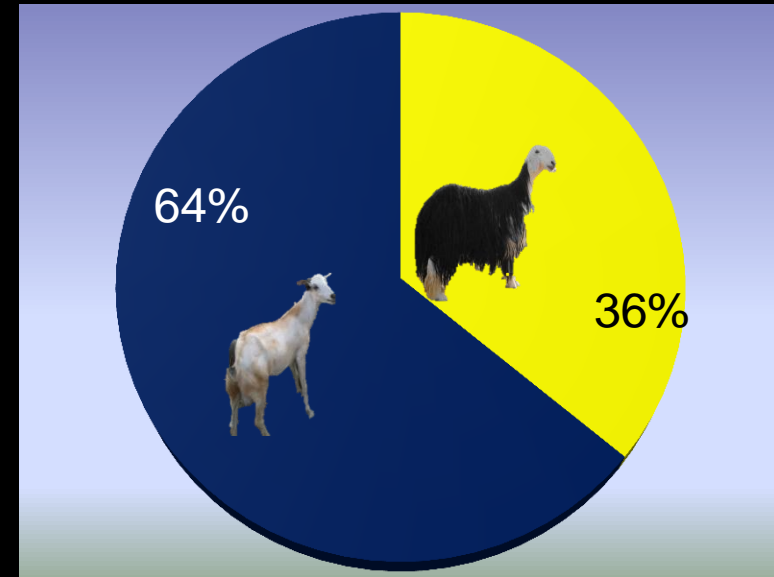
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## Conclusion

Individual ophthalmic examinations are not frequently performed as part of a herd health program but are very important to ensure the health of herd.

In general, sheep are more resistant to ocular affections than goats.



IKC and hypopyon are the highest two conditions seen in Acute cases  
Cataract is the highest condition seen in chronic cases in both sheep and goats

## Conclusion

From the owners perspective ultrasound provided a more precise tool for investigating the eyes and was influential in making decisions regarding the treatment of their animals whenever was possible.

From the practitioners' point of view, detection of ocular abnormalities using ultrasound prior to any interference helped in planning the possible way(s) of management and treatment.

It also provides a better prognosis of the expected outcomes.

