

Sawa private university

College of health and medical technology

fourth class

3rd eye disease lecture

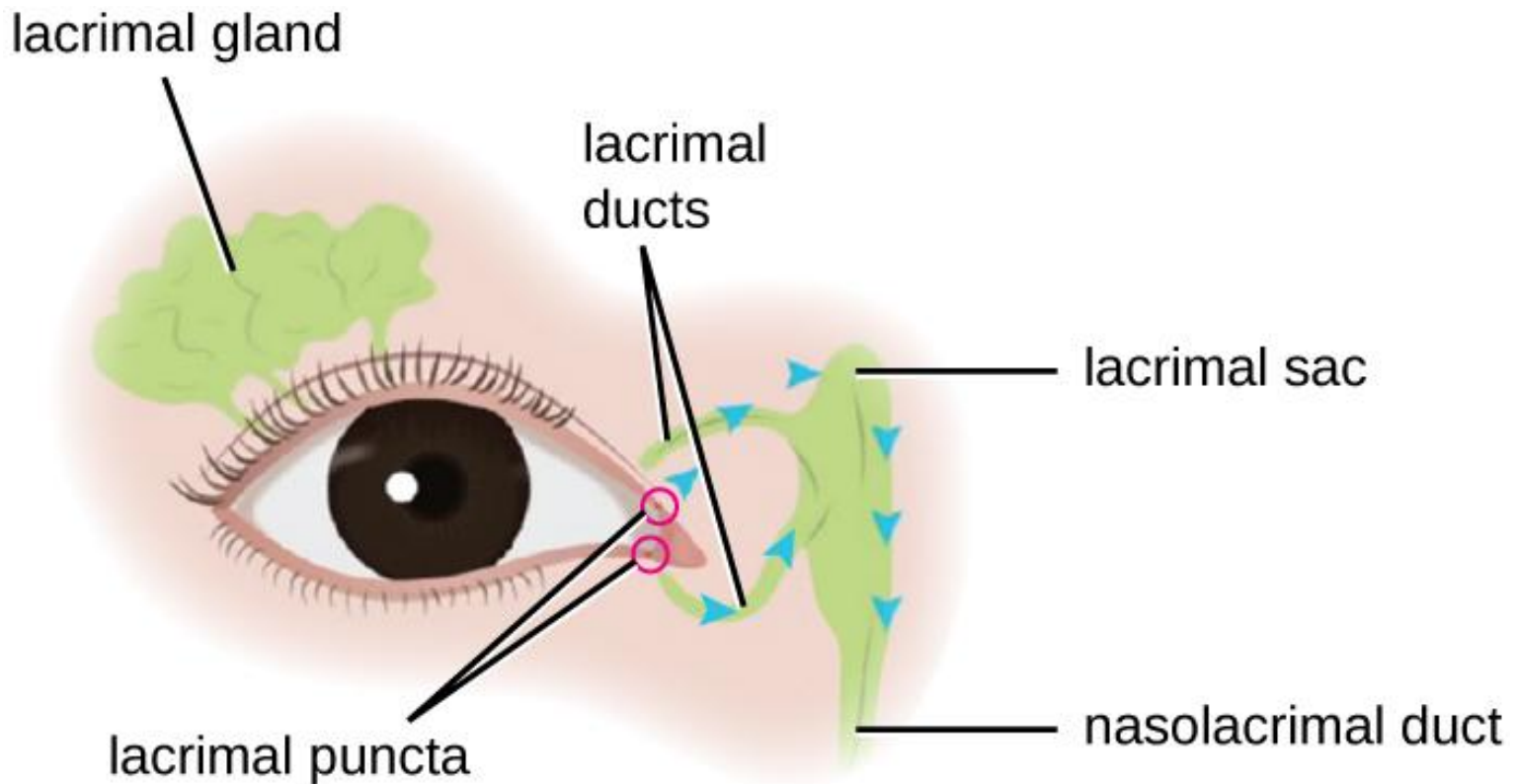
Lacrimal Drainage Disease: Causes and Evaluation

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Normal Tear Drainage System

- Tears flow: Lacrimal gland → Eye surface → Puncta → Canaliculi → Lacrimal sac → Nasolacrimal duct → Nose.
- This system drains tears into the nose (why we sniff when we cry).





What Happens in Disease

- When any part of the system is blocked or infected, tears cannot drain → epiphora (watering of eyes).
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Common Causes

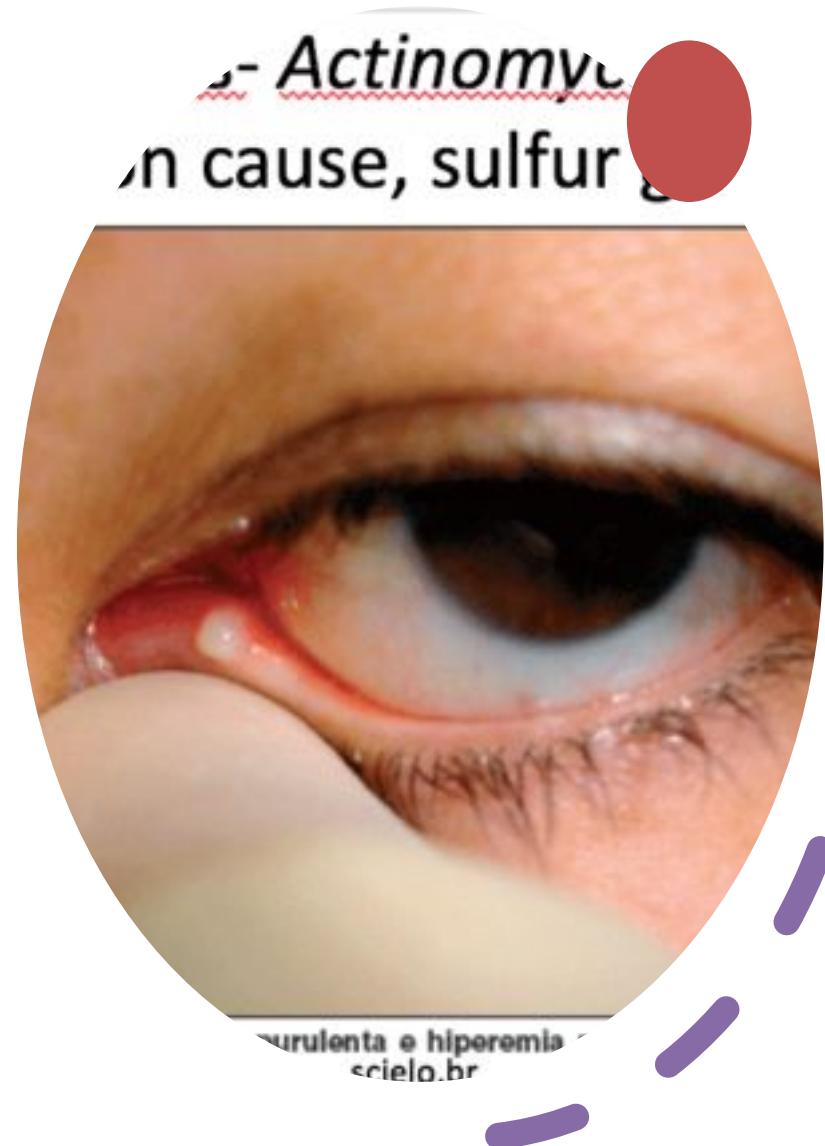
Punctum — Stenosis,
malposition (age, inflammation)

Canaliculi — Infection or trauma
(Actinomyces, punctal plugs)

Lacrimal sac — Infection
(dacryocystitis)

Nasolacrimal duct —
Obstruction (fibrosis, trauma)

Functional — Poor pump (eyelid
laxity)





Types of Disease

- Canaliculitis: Sticky discharge, pouting punctum, yellow granules.
- Acute dacryocystitis: Painful red swelling near nose; pus on pressure.
- Chronic dacryocystitis: Long-term tearing and discharge.
- Functional epiphora: Normal duct but poor eyelid pump.

Symptoms

Watering (especially outdoors or in wind)

Discharge or sticky eyelids

Redness or swelling near inner corner

Recurrent eye infections

Pain at inner canthus (acute infection)

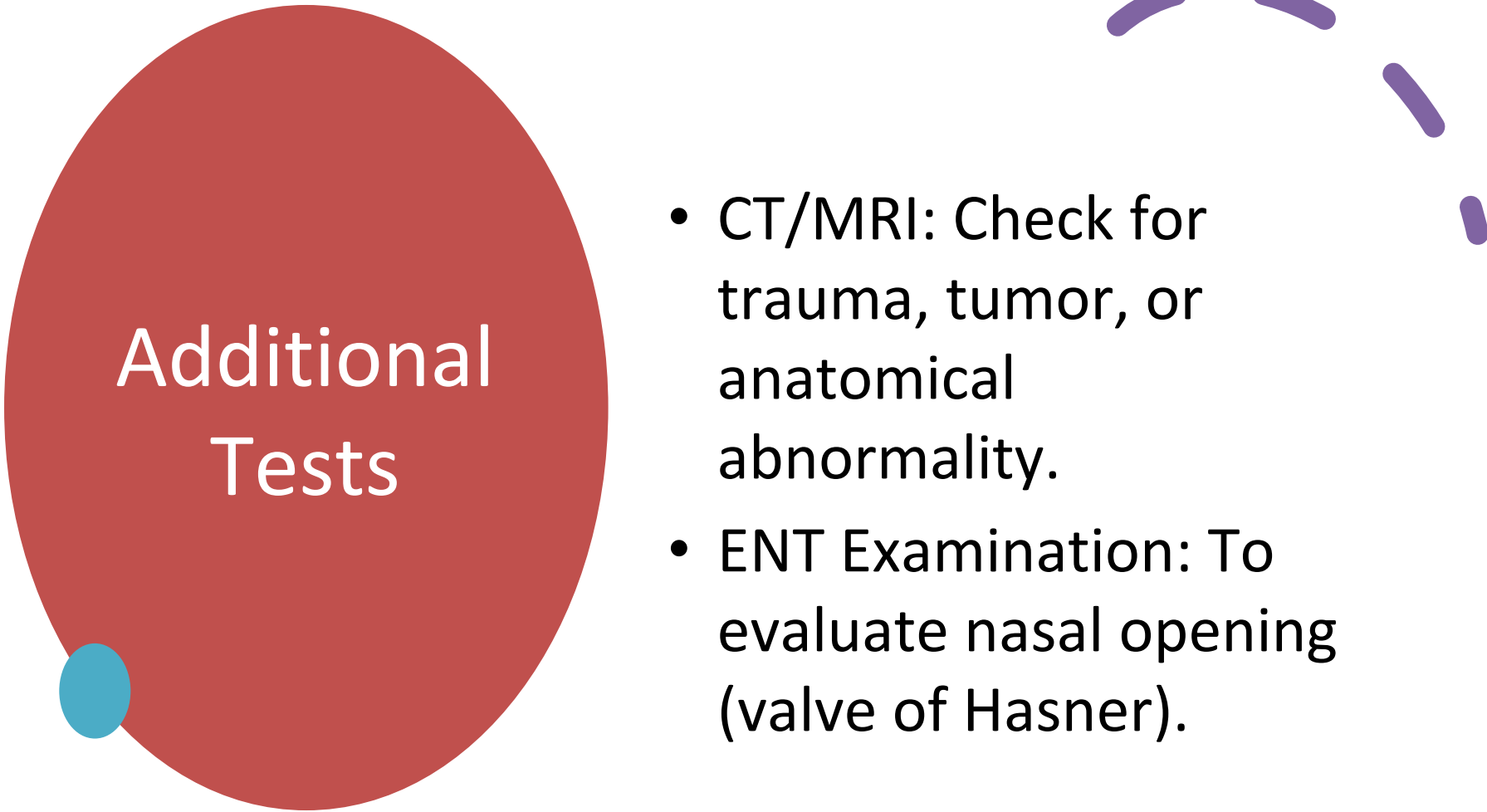


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Clinical Examination

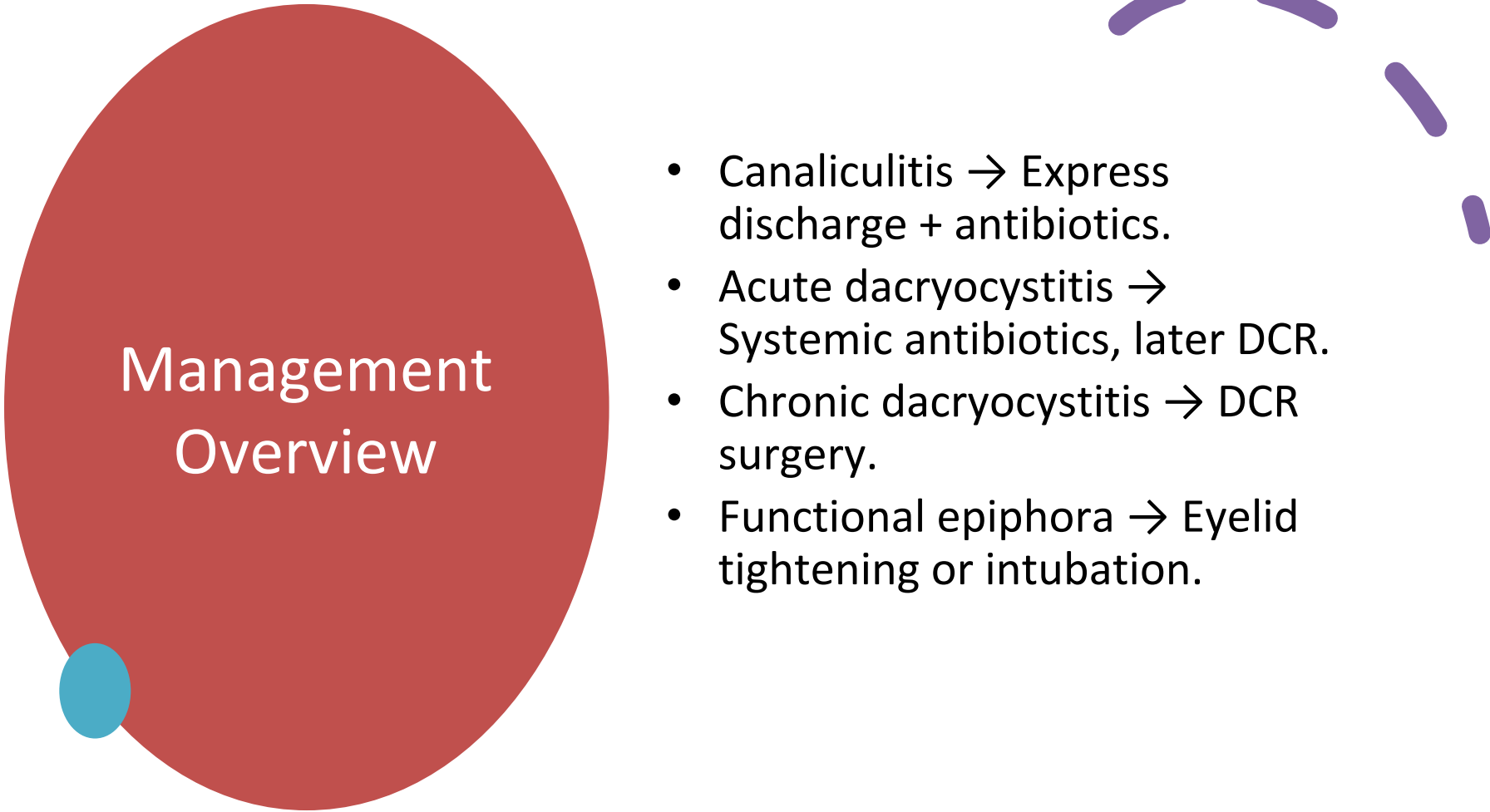
- Look: Eyelids, puncta, tear meniscus.
- Touch (ROPLAS test): Press over sac → pus = blockage/infection.
- Fluorescein Dye Test: If dye remains after 5 min → obstruction.
- Irrigation/Probing: Inject saline through punctum → reflux = blockage.





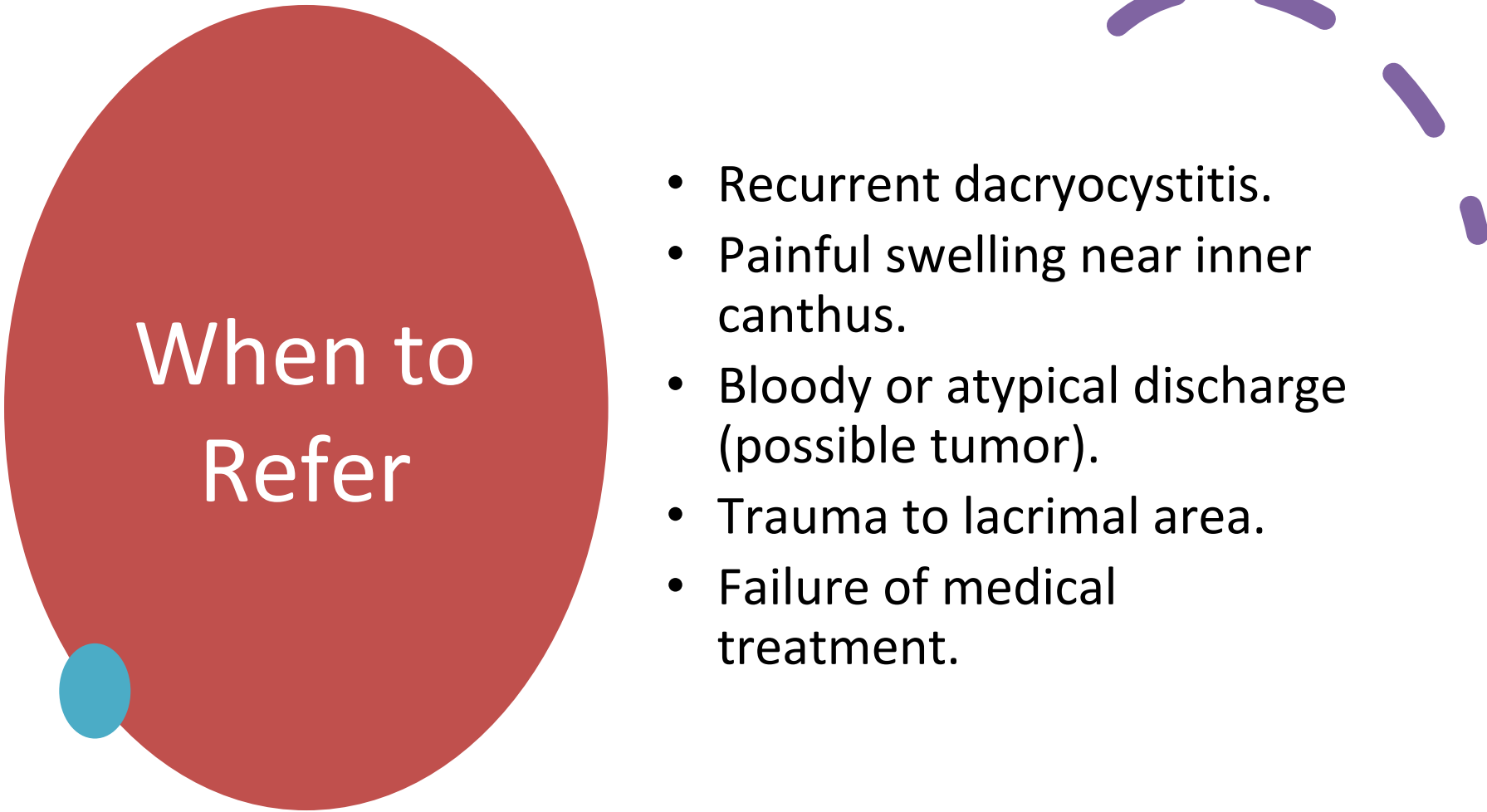
Additional Tests

- CT/MRI: Check for trauma, tumor, or anatomical abnormality.
- ENT Examination: To evaluate nasal opening (valve of Hasner).



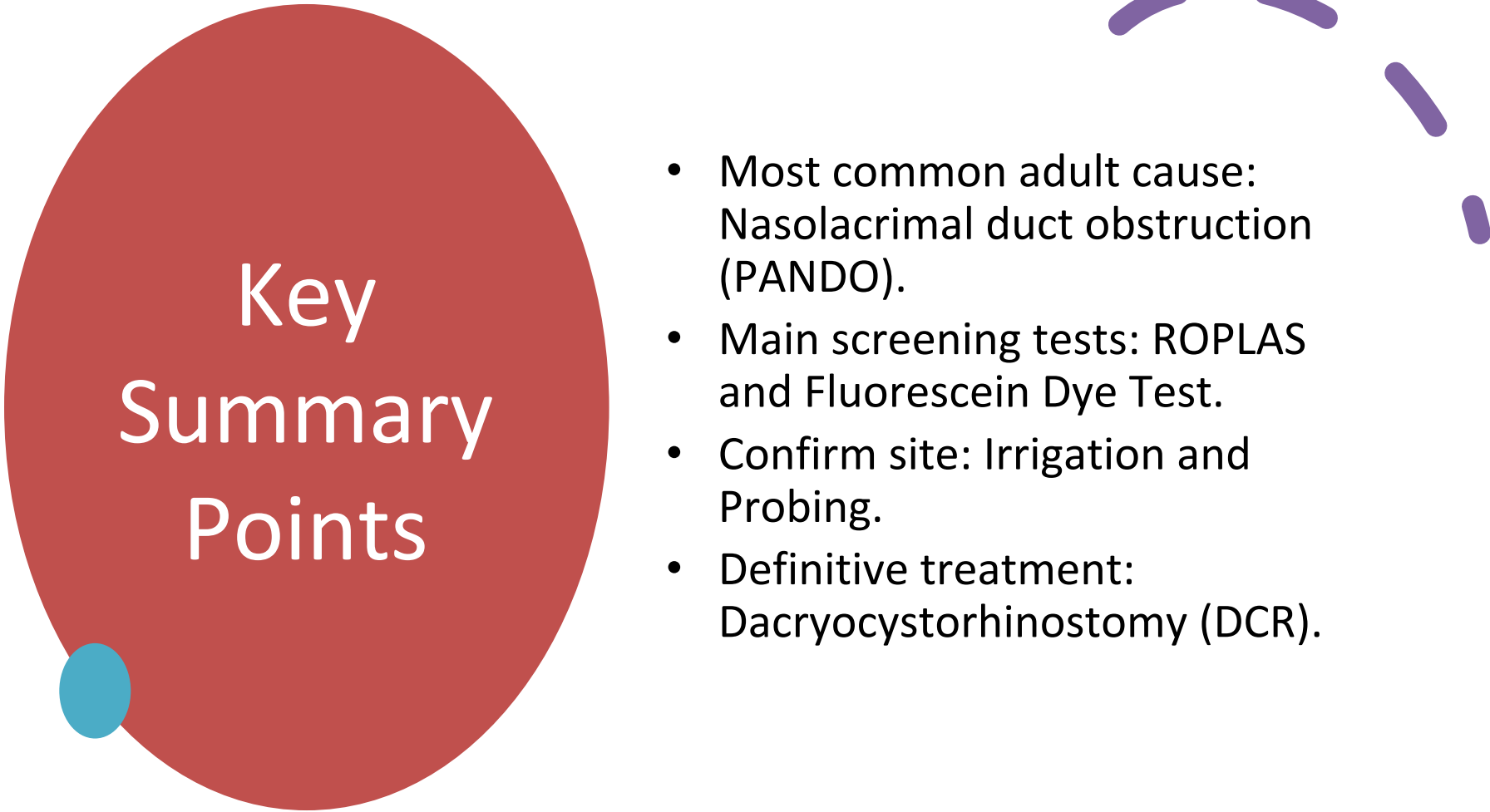
Management Overview

- Canaliculitis → Express discharge + antibiotics.
- Acute dacryocystitis → Systemic antibiotics, later DCR.
- Chronic dacryocystitis → DCR surgery.
- Functional epiphora → Eyelid tightening or intubation.



When to Refer

- Recurrent dacryocystitis.
- Painful swelling near inner canthus.
- Bloody or atypical discharge (possible tumor).
- Trauma to lacrimal area.
- Failure of medical treatment.



Key Summary Points

- Most common adult cause: Nasolacrimal duct obstruction (PANDO).
- Main screening tests: ROPLAS and Fluorescein Dye Test.
- Confirm site: Irrigation and Probing.
- Definitive treatment: Dacryocystorhinostomy (DCR).

References

- EyeWiki: Dacryocystitis –
<https://eyewiki.org/Dacryocystitis>
- EyeWiki: Canaliculitis –
<https://eyewiki.org/Canaliculitis>
- EyeWiki: Nasolacrimal Duct Obstruction –
https://eyewiki.org/Nasolacrimal_Duct_Obstruction
- StatPearls: Epiphora Evaluation –
<https://www.ncbi.nlm.nih.gov/books/NBK470567/>