



A Case of a lesion

Mr Allon Barsam
Consultant Ophthalmologist
OCL Vision



History

- 45 year old female
- Dx with shingles 6/52 ago on face left side – tx with oral antivirals and antibiotics by GP – finished now
- Saw Ophthalmologist 4/52 ago as vision had become blurry and eye sore – told had ulcer and given ganciclovir and antibiotic drops
- Seen 10 days later and was given Dexamethasone to use on a tapering dose starting QDS
- Stopped all drops and meds 2 weeks ago

- Yday noted drop in LE vision – had been getting worse for a few days prior
- Vision misty and blurry
- Eye feels gritty and light sensitive

Medical History

- No general health issues
- No previous history of shingles or cold sores on face and lips
- No regular medications taken and no known allergies

Ocular history:

- Prev Lasik 12 years ago
- Specs – NV only

Initial Appt

Distance VA			
Right eye	Unaided -0.10	Unaided 1.10	Left eye Pinhole 0.30
Right eye	+0.50 / -0.75 x 169	Autorefraction	Left eye -0.50 / -1.75 x 53 (SE: -1.38)
R 14	IOP	L 35	

Examination	Left eye
NAD	Eyelids NAD
NAD	Lacrimal NAD
NAD	Orbit NAD
NAD	Conj / sclera NAD
NAD	Cornea superior haze - KPs on endothelium
NAD	AC NAD
NAD	Gonioscopy NAD
NAD	Pupil / iris NAD
NAD	Lens NAD
NAD	Vitreous NAD
NAD	Vitreoretinal NAD
NAD	Post seg NAD
NAD	Optic disc cup-to-disc ratio: 0.30 NAD

Discussion Points:

- *What is current situation? What is the diagnosis*
- *How do we treat it?*

Initial Appt

Plan

Medication	Added	Brimonidine + Timolol COMBIGAN	2 mg/ml / 5 mg/ml eye drops - 1 drop - twice a day - 4 weeks	Left eye	30-Jun-2023	4 Weeks
	Added	Dexamethasone DEXAFREE	0.1% 0.4 ml unit dose eye drops preservative free 1 drop - every two hours - 4 days 1 drop - every three hours - 2 weeks 1 drop - four times a day - 2 weeks 1 drop - three times a day - 2 weeks 1 drop - twice a day - 6 weeks 1 drop - once a day - 2 months	Left eye	30-Jun-2023	5 Months

Comments I would like you to be seen again in 2 weeks time for a pressure a check or sooner if things aren't improving or there is any change.

Discussion Points:

- *How does Combigan work?*
- *Why do we add steroids*

2 weeks later – see photo

Distance VA

Right eye

Unaided
-0.10

Unaided
0.40

Pinhole
0.20

Left eye

Right eye

+1.50 / -0.50 x 149

Autorefraction

+0.25 / -1.00 x 31

Left eye

(SE: -0.25)

Right eye

**Subjective
Dist.**

+0.00 / -1.50 x 40

Left eye

0.20 (SE: -0.75)

R
10

IOP

L
13

Examination

Left eye

Eyelids

NAD

Lacrimal

NAD

Orbit

NAD

Conj / sclera

NAD

Cornea

keratic precipitates

AC

NAD

Gonioscopy

NAD

Pupil / iris

NAD

Lens

NAD

Vitreous

NAD

Vitreoretinal

NAD

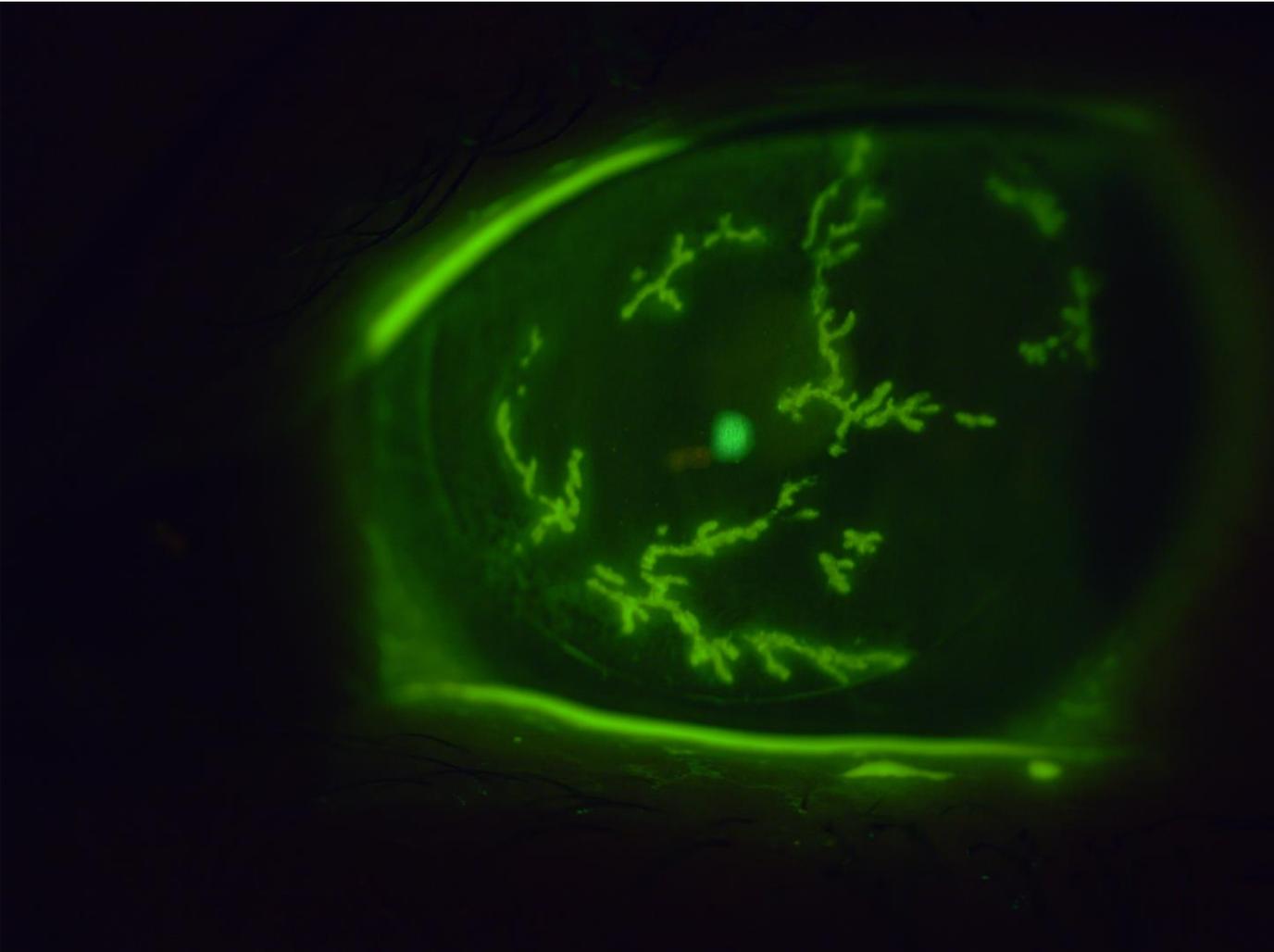
Post seg

NAD

Optic disc

NAD

4 weeks after last visit



Distance VA			
Right eye	Unaided	Unaided	Left eye
	0.00	1.00	Pinhole 0.30

Right eye	Autorefraction	Left eye
+1.25 / -0.50 x 152	-1.50 / -1.00 x 14	(SE: -2.00)

R	IOP	L
17		17

Discussion points

- What are you seeing?
- What's happened?
- How do you treat?

4 weeks after last visit

Plan

Medication	Added	Aciclovir	400 mg tablets - 1 tablet - three times a day - indefinitely	Oral	09-Aug-2023	Indefinitely
	Added	Ganciclovir VIRGAN	0.15% eye gel 1 drop - five times a day - 7 days 1 drop - three times a day - 7 days	Left eye	09-Aug-2023	2 Weeks

6 months after initial visit

Distance VA

Right eye

Unaided
-0.10

Left eye

Unaided
-0.10

Examination

Eyelids NAD

Lacrimal NAD

Orbit NAD

Conj / sclera NAD

Cornea trace haze now

AC NAD

Gonioscopy NAD

Pupil / iris NAD

Lens NAD

Vitreous NAD

Vitreoretinal NAD

Post seg NAD

Optic disc NAD

Right eye

+1.50 / -0.25 x 152

Autorefraction

+2.25 / -1.25 x 83

Left eye

(SE: +1.63)

Right eye

: +0.13) +0.50 / -0.75 x 180

-0.10

Subjective Dist.

+0.00 / -0.75 x 15

Left eye

-0.10 (SE: -0.38)

R
13

IOP

L
13

Plan

Medication

Changed	Aciclovir	400 mg tablets - 1 tablet - twice a day - indefinitely	Oral	05-Mar-2024	Indefinitely
Changed	Loteprednol LOTEMAX	0.5% eye drops - 1 drop - once a day - indefinitely	Left eye	05-Mar-2024	Indefinitely

Comments

doing well
slow wean to once a day lotemax
see in 6 months

Discussion notes

External Examination

- Vesicular rash in V1 dermatome
- Rash respects midline
- Lesion on tip of nose



Hutchinson's Sign

Lesions on the tip of the nose indicate involvement of the nasociliary branch of the trigeminal nerve.

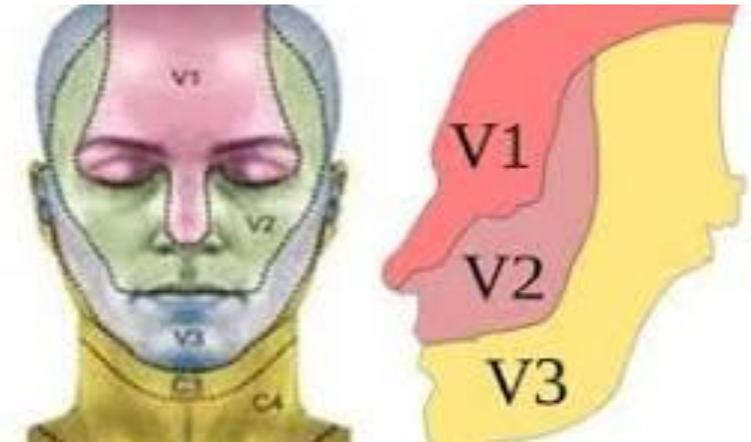
This branch also innervates:

- Cornea
- Ciliary body
- Iris

Ocular involvement occurs in approximately 70–75% of patients with Hutchinson's sign.

Discussion point:

Does a negative Hutchinson's sign exclude ocular involvement?



Discussion notes

<u>Feature</u>	<u>HZO Pseudodendrites</u>	<u>HSK Dendrites</u>
Appearance	Raised mucoid plaques - 'stuck-on'	Ulcerated epithelial defect
Terminal bulbs	Absent or minimal. Epithelium heaped at edges	Present and prominent. Rounded
Staining	Mucus stains with rose bengal/lissamine; minimal fluorescein uptake	Ulcer base stains well with fluorescein; rose bengal at margins
Corneal sensation	Reduced (often marked)	Reduced
Distribution	May be scattered/peripheral	Often central

Discussion notes

1. Oral antivirals (e.g. aciclovir)

Role:

Suppress **viral replication**

Reduce:

- Severity of acute disease
- Risk of ocular involvement
- Complications (especially early on)

Key discussion point:

In later stages, they are **protective, not curative**

In this case:

Needed because **steroids are being used**

Prevents **reactivation while immunosuppressed**

Clinical takeaway:

Antivirals are essential early, and later act as **“cover” when using steroids**

2. Topical antivirals (e.g. ganciclovir gel)

Role:

- Treat **active epithelial disease only**

Key discussion point:

- Limited role in stromal/uveitic disease

In this case:

- Likely **no longer needed** if no dendrites/pseudodendrites

Clinical takeaway:

If there's **no epithelial involvement** → **topical antivirals add little value**

4. IOP-lowering drops (e.g. Combigan)

Role:

- Manage **IOP rise**

Why IOP rises in HZO:

- Inflammation (uveitis, trabeculitis)
- Steroid response

Why Combigan specifically:

- Dual mechanism:
 - ↓ aqueous production
 - ↑ uveoscleral outflow
- Useful in **inflammatory IOP spikes**

Clinical nuance:

- Avoid prostaglandin analogues early (can worsen inflammation)

Clinical takeaway:

IOP rise is common and multifactorial - treat early to prevent optic nerve damage

3. Topical steroids (e.g. dexamethasone, prednisolone)

Role:

- Suppress **immune-mediated inflammation**

•Treat:

- Stromal keratitis
- Anterior uveitis
- Trabeculitis

Why they matter most:

- Most HZO morbidity is **immune-driven, not viral**

In this case:

- Central to treatment after acute phase

Risks (prompt discussion):

- Raised IOP
- Delayed epithelial healing
- Risk if used **without antiviral cover**

Clinical takeaway:

Steroids are the **main treatment in later HZO**, but require control + monitoring

Discussion notes

Medication

Core Role

When it matters most

Oral antiviral

Viral suppression

Early disease + steroid cover

Topical antiviral

Epithelial disease only

Active dendrites

Steroid

Immune control

Stromal keratitis / uveitis

IOP drops

Protect optic nerve

Raised IOP