



A case of Basal Cell Carcinoma of eyelid and its reconstruction using Glabellar Flap Technique

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INTRODUCTION

- The most common eyelid malignancies in India are :
 1. Sebaceous Gland Carcinoma (SGC)
 2. Basal Cell Carcinoma (BCC)
 3. Squamous Cell Carcinoma (SCC)¹
- BCC: slow-growing, locally destructive skin cancer of the eyelids and the periocular area .
- The classic manifestation is a smooth, translucent nodule with rolled pearly white edges with telangiectasia and often a central ulcer or a crust covering it.
- **The gold standard for treatment:** Surgical excision with 4-5 mm safety margin combined with primary repair².
- Reconstruction is undertaken when all margins are found to be free of tumor.

REFERENCES

1. Sihota R, Tandon K, Betharia SM, Arora R. Malignant eyelid tumors in an Indian population. Arch Ophthalmol 1996;114:108-9.
2. Stefan P, Andreas K, Philipp N, Rainer K, Gunda N, Steinkogler F J. Long term results after surgical basal cell carcinoma excision in the eyelid region. Br J Ophthalmol 1999; 83:85–8.

PATIENT PROFILE

- 65y/ Female, residing at Nigdi, Pune

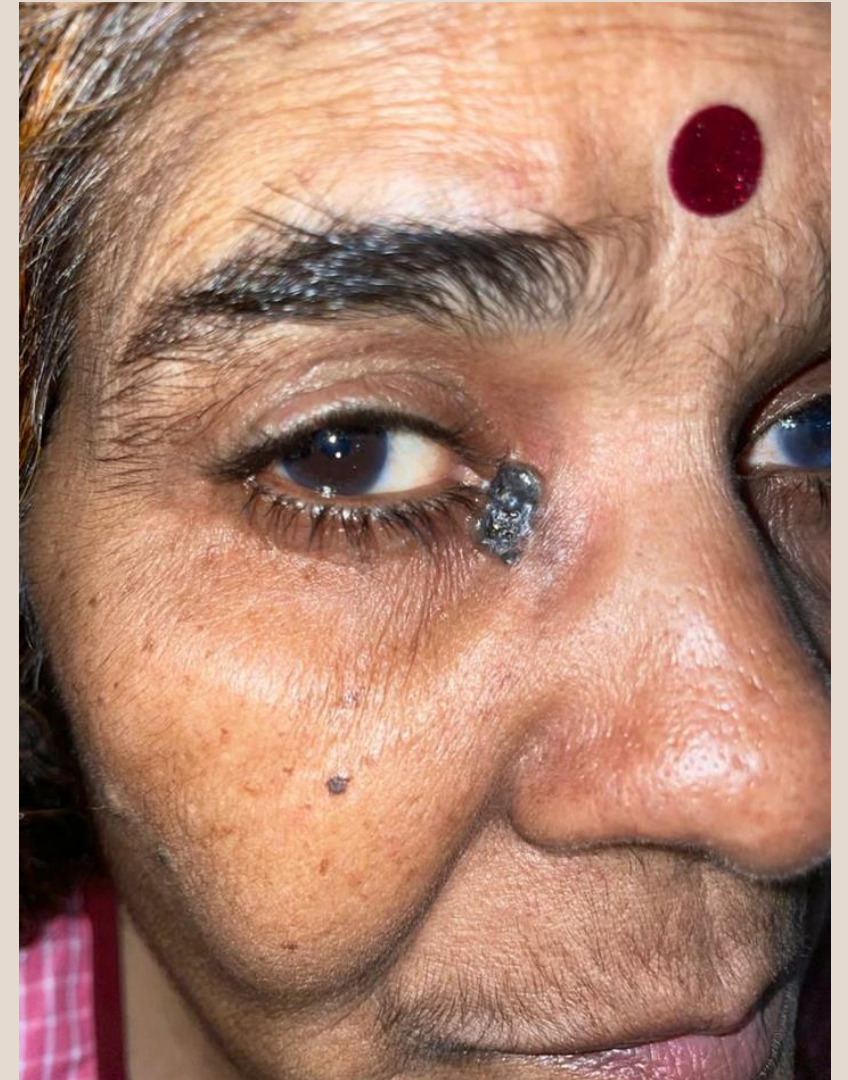
CHIEF COMPLAINTS:

- Black-colored lesion on the inner side of her right eye since last 6 months

HISTORY OF PRESENTING ILLNESS

- **Pigmented (black)**
 - **Painless**
 - **Progressive**
- } **6 months**

- No H/o pain or redness
- No H/o bleeding or discharge from the lesion
- No H/o ocular trauma or surgery



- MEDICAL HISTORY : Not significant
- FAMILY HISTORY: No H/O Similar Complaints
- GENERAL AND SYSTEMIC EXAMINATION : WNL
- LYMPH NODES:

On palpation of LN -

Preauricular & Postauricular

Parotid

Submental

Submandibular

Cervical



No enlargement or tenderness.

OCULAR EXAMINATION

	RE	LE
Best Corrected Visual Acuity	6/6p	6/6p
Near Vision	N6 (+3.00DS)	N6 (+3.00DS)
Extraocular Movements	Full, Free, Painless	Full, Free, Painless
Head Posture And Facial Symmetry	Normal	
Orbital Margin	Normal	Normal
Anterior segment	WNL	WNL
Fundus examination	WNL	WNL

	RE	LE
Eyelid	<p><u>On inspection:</u></p> <p>Shape: Irregular, vertically oval, Nodulo ulcerative Size: 1cm X 1.5cm Margins: rolled out, raised Colour: Pigmented (black) Location: medial canthal region</p> <p><u>On Palpation:</u></p> <p>Induration present Fixed to underlying bone</p> <p>No local rise of temperature/ tenderness</p>	Normal
Eyelashes	Normal	Normal
eyebrow	Normal	Normal
ROPLAS	--ve	-ve



Provisional Diagnosis

- Basal cell carcinoma
- Malignant melanoma
- Squamous cell carcinoma

CT orbit

A small soft tissue lesion at the medial canthus of the right eye with no underlying bony erosion or orbital extension was seen.

- PLAN OF MANAGEMENT

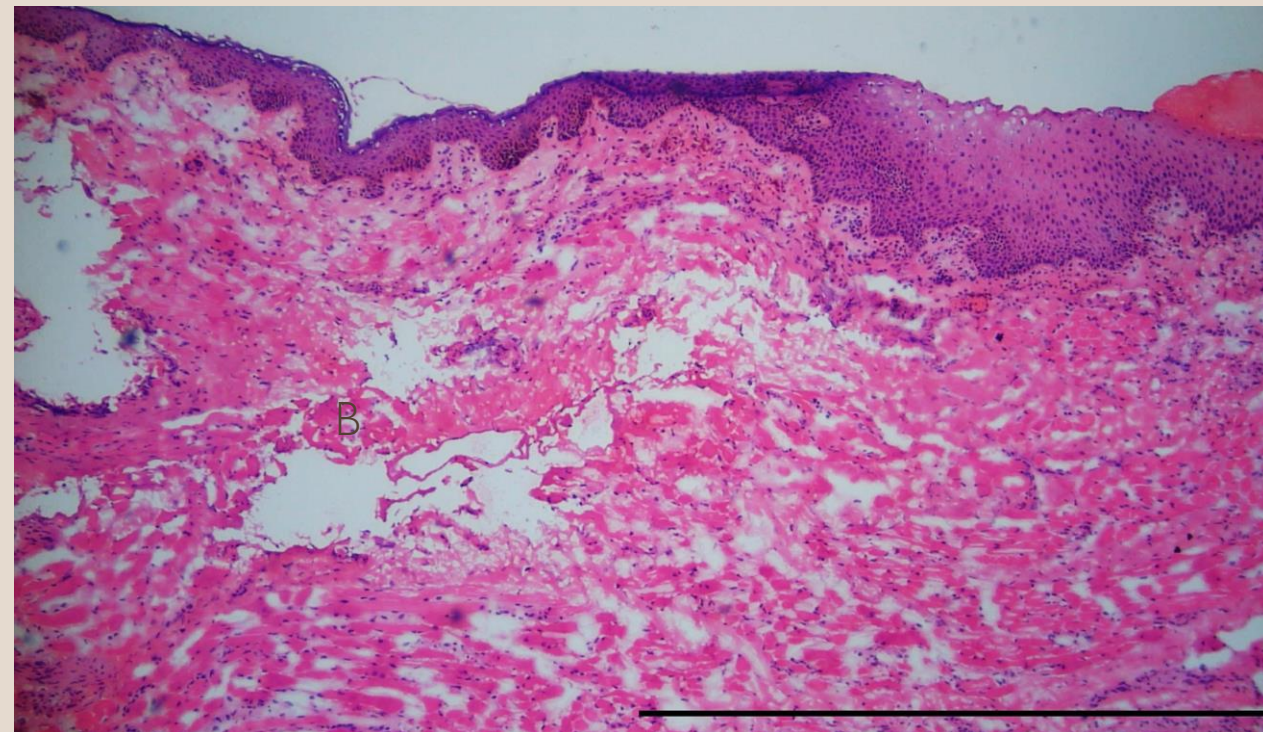
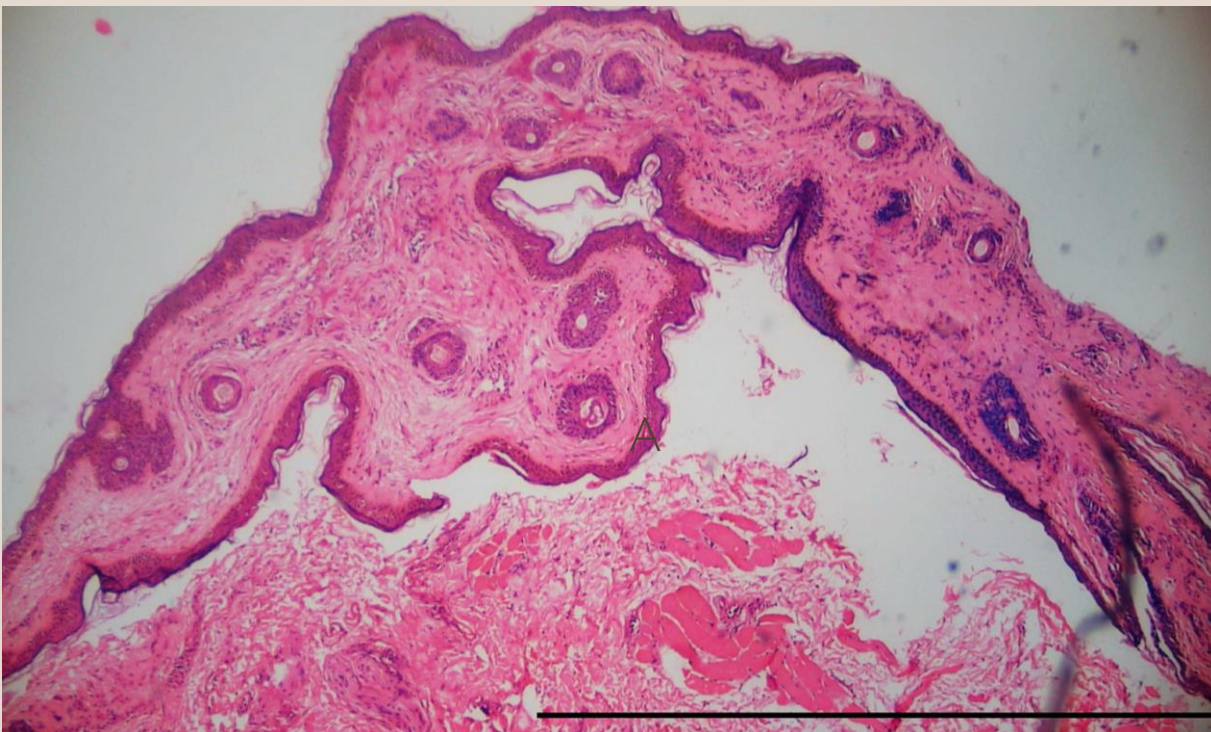
(RE) Wide local excision under frozen section control of margin followed by surgical reconstruction.

PROCEDURE



- A large **full thickness excision** was performed with 5mm clearance margin.
- Frozen section of the excised margins were done to confirm complete tumor removal.

Frozen section examination of surgical margins





The defect was reconstructed with a midline forehead **GLABELLAR FLAP TECHNIQUE**.





POD 1

Flap in situ

Wound site appears healthy.

All sutures intact

Mild edema

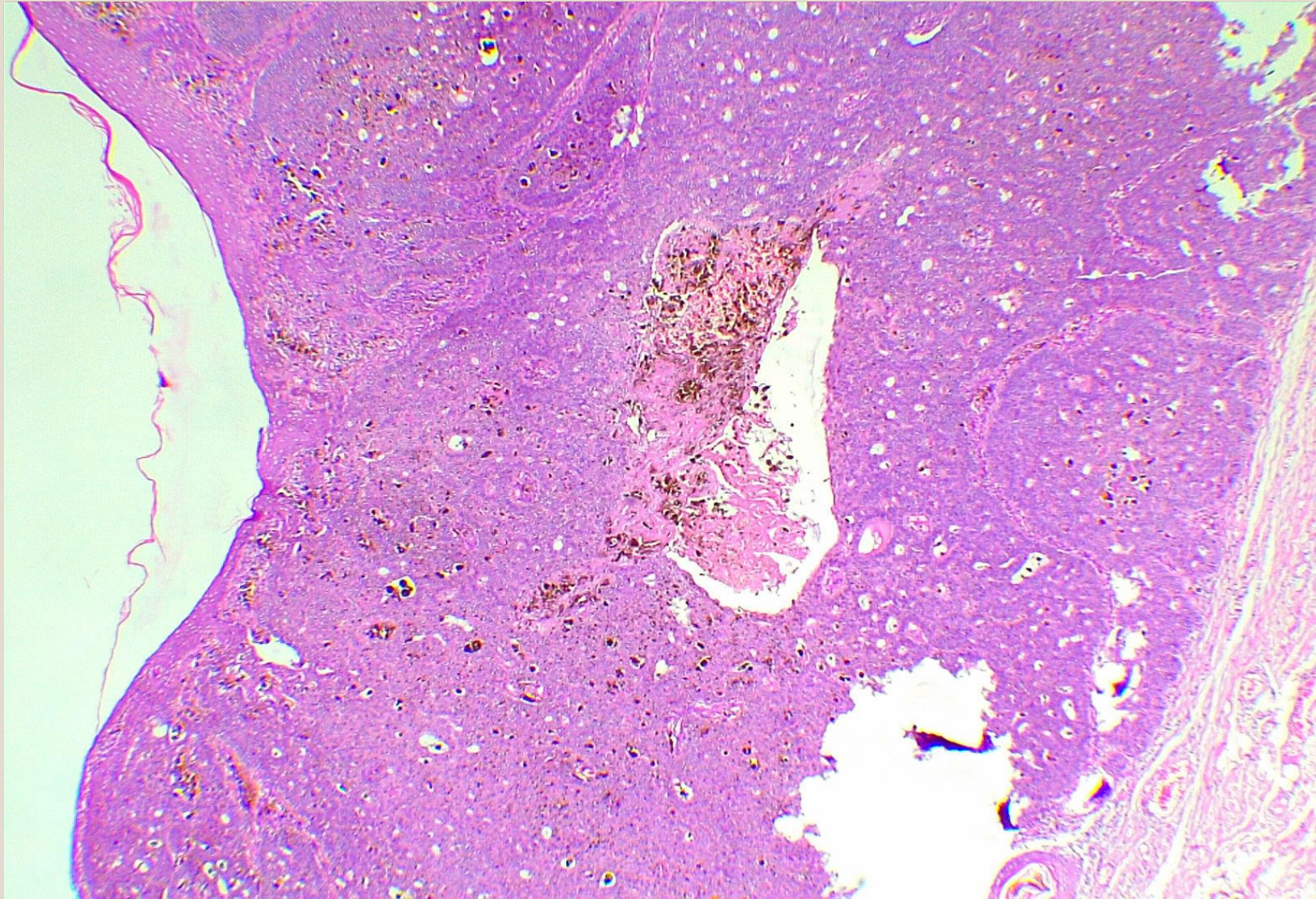
GROSS

- Received a grey black soft tissue piece with surrounding skin measuring 1.2 x 1 x 0.4 cm.
- On cut surface, a grey black tumor identified measuring 1 x 0.5 x 0.4 cm.

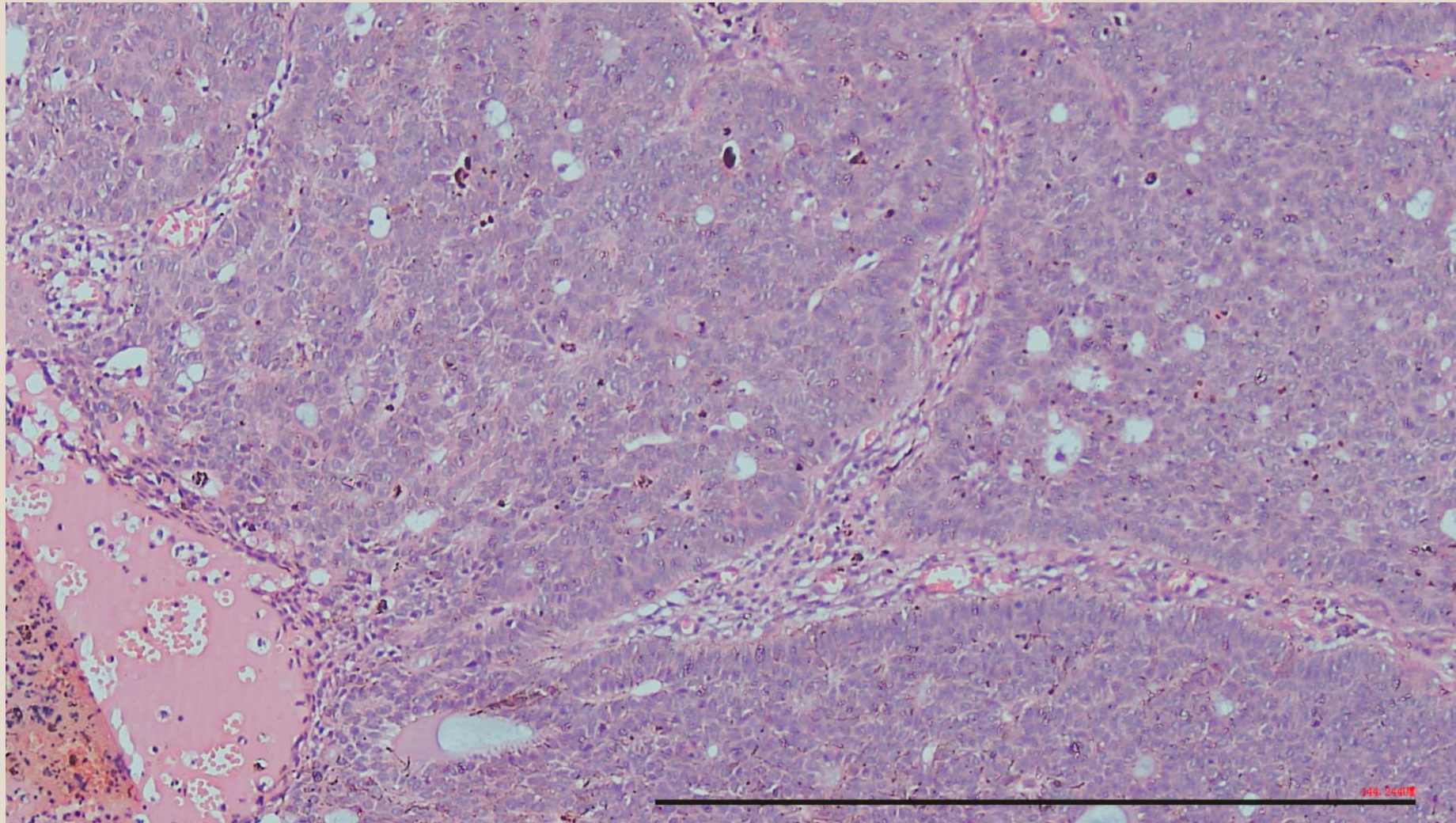
Microscopy



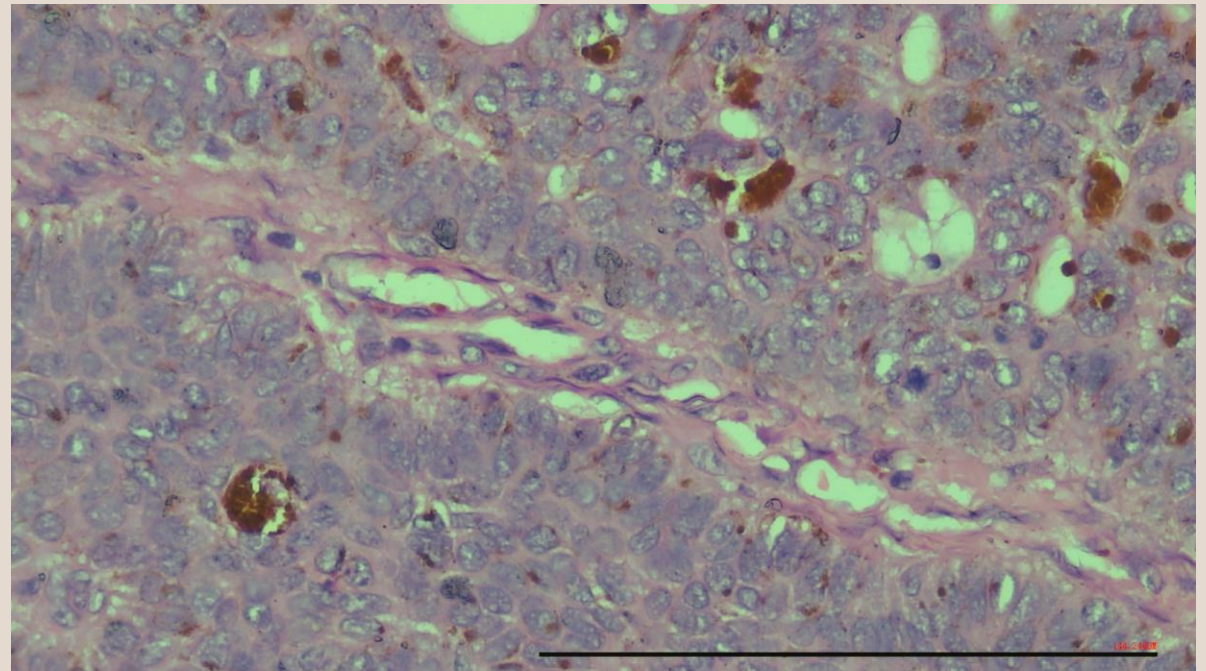
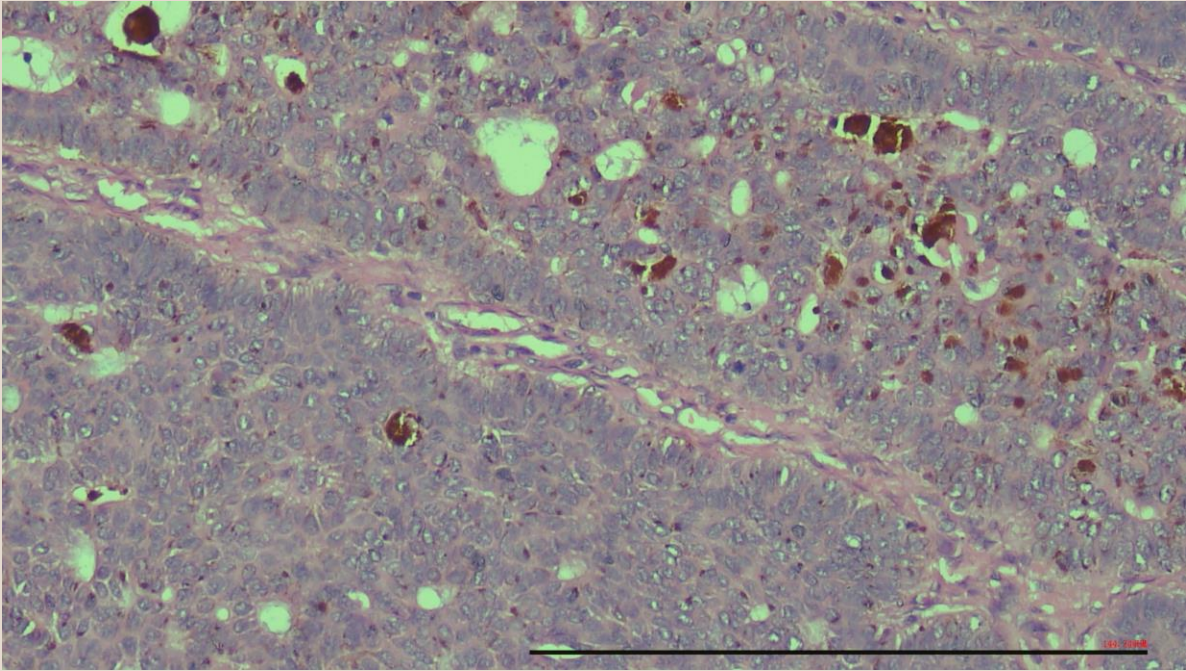
- The microphotograph of scanner view shows epidermis with a nodular growth arising from it and underlying muscle tissue.



A 4x view showing a nodular growth and melanin pigment



A low power view exhibiting islands and downgrowth with peripheral palisading of nuclei.



Microphotograph showing Basaloid type of nuclei, coarse chromatin with scanty cytoplasm. Mitosis can be seen.

Final Diagnosis :

Nodular Basal Cell Carcinoma



ON FOLLOW UP (1 MONTH)



PRE OP





POST OP



DISCUSSION

Basal Cell Carcinoma

- Second most common eyelid malignancy³
- Derived from the basal cell layer of the epidermis
- 60 years⁴
- Exposure to sunlight (particularly UVB)⁵
- Most common location: lower eyelid  medial canthus  upper eyelid.

REFERENCES

3. Shields JA, Demirci H, Marr BP, Eagle RC Jr., Shields CL. Sebaceous carcinoma of the eyelids: Personal experience with 60 cases. *Ophthalmology* 2004;111:2151-7.
4. Shi Y, Jia R, Fan X. Ocular basal cell carcinoma: a brief literature review of clinical diagnosis and treatment. *Onco Targets Ther*. 2017 May 8;10:2483-2489. doi: 10.2147/OTT.S130371. PMID: 28507440; PMCID: PMC5428761.
5. Gallagher RP, Hill GB, Bajdik CD, Fincham S, Coldman AJ, McLean DI, Threlfall WJ. Sunlight exposure, pigmentary factors, and risk of nonmelanocytic skin cancer: I. Basal cell carcinoma. *Archives of dermatology*. 1995 Feb 1;131(2):157-63.

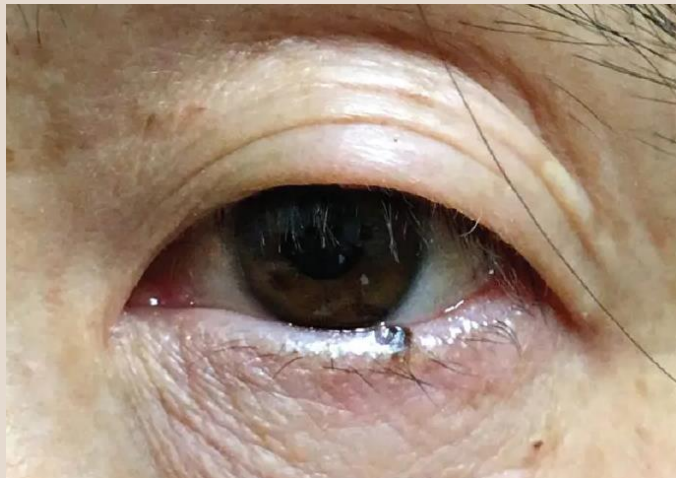
Types of Basal Cell Carcinoma



Nodular



Nodulo- Ulcerative



Pigmented



Morpheaform

GLABELLAR FLAP TECHNIQUE

- The glabella is a region between eyebrows with skin that has the ability to reconstruct nearby structures.
- The Glabellar flap technique allows the skin to be **transposed** from the glabellar area by **advancing and rotating** towards the defect.
- Following tumor resection, this technique is thought to be the **most effective** for correcting major defects covering the **medial canthal region**⁶.
- Provides **similar skin texture, color, and thickness** with **minimal postoperative contracture** and **fast healing** owing to its vascular supply.

REFERENCES

- 6 Balchev G, Balabanov C, Murgova S. Glabellar flap technique in oculoplastic surgery. Indian J Ophthalmol. 2022 Jan;70(1):281-286. doi: 10.4103/ijo.IJO_1463_21. PMID: 34937255; PMCID: PMC8917529.

THANK YOU