

بِسْمِ اللّٰهِ الرَّحْمٰنِ الرَّحِیْمِ

Squamous cell carcinomas of the eyelid . Different scenarios

By

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Squamous cell carcinoma of the lid

- SCC is a much less common, more aggressive lethal tumour that metastasize to regional lymph node or intracranial cavity via the orbit(perineural).
- It accounts for 5-10% of eyelid malignancy.
- **Common site:** lower lid and inner canthus.
- **Risk factors:** fair complexion and chronic sun exposure.

Squamous cell carcinoma of eyelid

Pathophysiology:

- mutations in the p53 tumour suppression gene.

Prognosis:

- Excellent with early adequate treatment.
- Fatal if neglected.

Poor prognostic factors

Poorly differentiated, perineural spread, orbital invasion and immunosuppressed patients.

Treatment

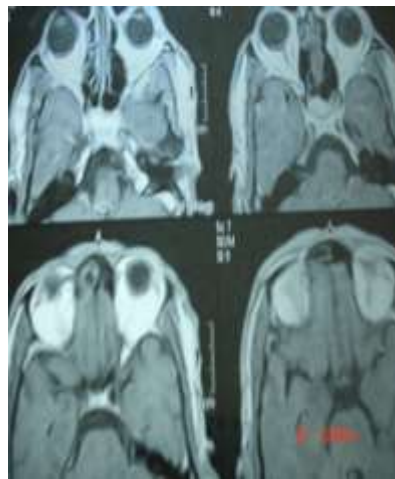
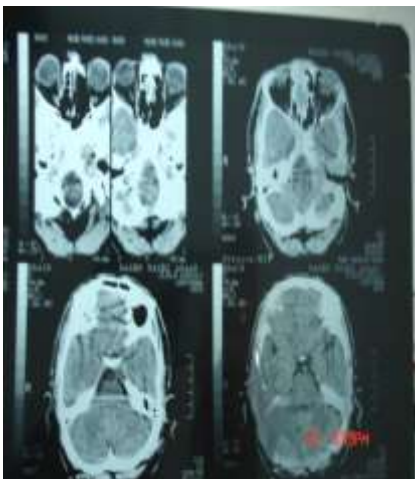
1. **Surgical excision** is the treatment of choice with adequate safety margin.
2. **Cryotherapy.**
3. **Radiotherapy.**
4. **Topical** immune modulator (imiquimod).
5. **Chemotherapy.**

Case 1 (2008)

- 45 years old male.
- Driver(frequent exposure to sunlight).
- History of recurrent left limbal mass excision within 5 years.
- No perception of light in left eye.
- Has both limbal and lower lid masses in left eye.
- No palpable pre-auricular or submandibular lymph nodes.
- Pathology report:limbal atypia and squamous cell carcinoma of the lid grade 2.



Imaging



1st surgery

Aggressive treatment

Enucleation with ball and conformer

Excision of the tumour with more than 1 cm safety margin(30/06/08)



pathology

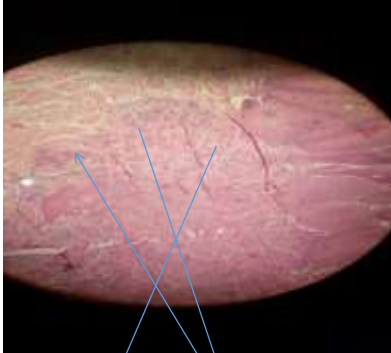
- **Border's histological grading:**
 - I-well differentiated:75% keratin pearls.
 - II-moderate differentiated:50% keratin pearls.
 - III-poorly differentiated:25% keratin pearls.
 - IV-undifferentiated:<25% keratin pearls.

Normal Histology of the Eyelid

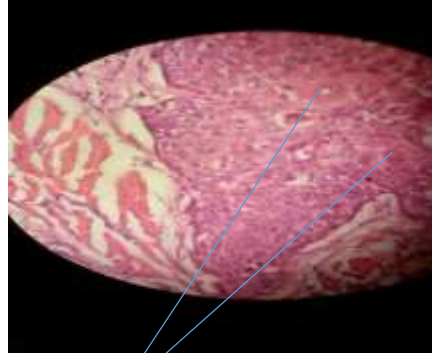


pathology

- Moderate-differentiated squamous cell carcinoma grade 2 with free safety margins.



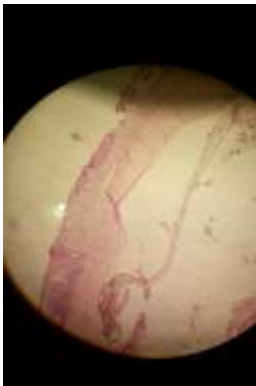
Dermal infiltration by malignant epithelial cells and cell nests.



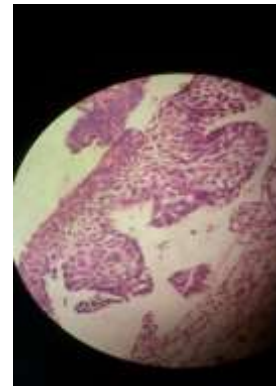
Moderate nuclear pleomorphism and keratin pearls.

pathology

Limbal atypia with hyperplasia of corneal epithelium



Hyperplasia of squamous epithelium of the cornea



Nuclear pleomorphism without invasion of B.M

2nd surgery

Lid reconstruction

Median forehead rotation flap

Mustard cheek rotation flap

Ear cartilage graft(08/07/08).



Amniotic membrane to help fornix formation and as a scaffold for epithelial cells to grow



2 weeks later



3rd surgery

- Mucous membrane graft
- Widening of palpebral fissure and putting larger conformer
 - Excision of ear dog flap(20/08/08)



Problems of contracted socket



9/11/2009

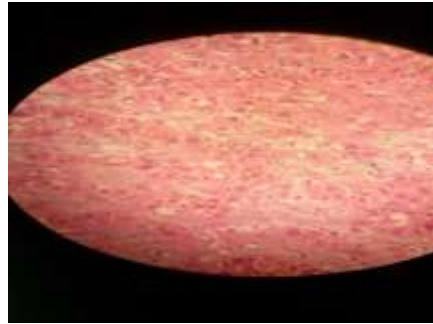
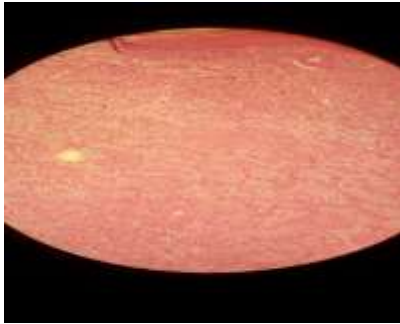


Incisional biopsy on 20/11/09



Recurrence with more aggressive form

- Poorly-differentiated squamous cell carcinoma grade III.



Poorly differentiated epithelial cells with vague tendency to nest formation.

9/11/09

20/11/09

3/12/09



Last surgery

- Total exentration with 3 cm safety margin
- Left eyebrow, side of the nose, both lids, skin above lateral and inferior orbital margins as one mass with orbital periosteum.

Total exentration

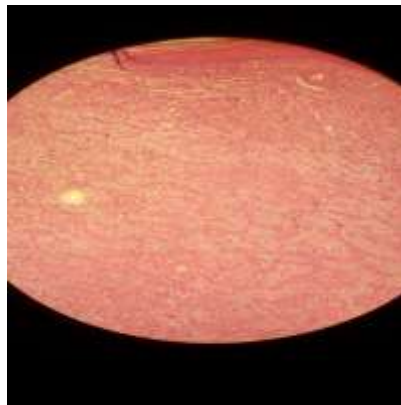
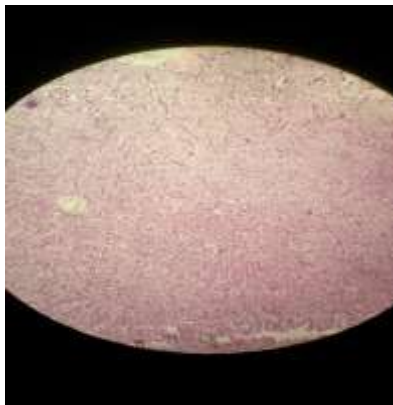


Total exentration

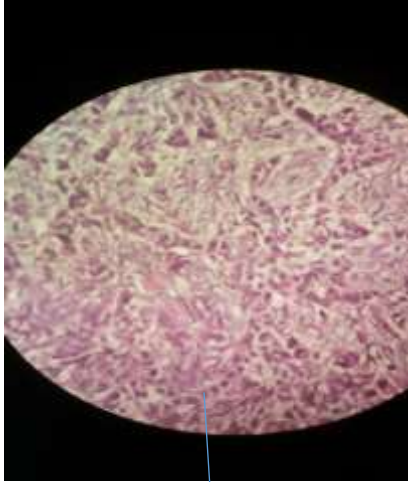


Pathology

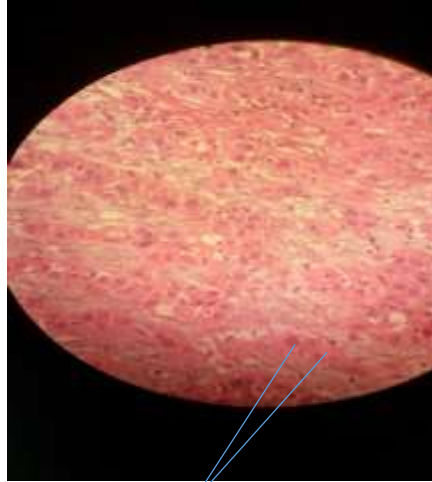
- Both poorly and undifferentiated squamous cell carcinoma grade III-IV



pathology



Cords of highly malignant epithelial cells with fibrous stroma and no cell nests or keratin formation(G4).



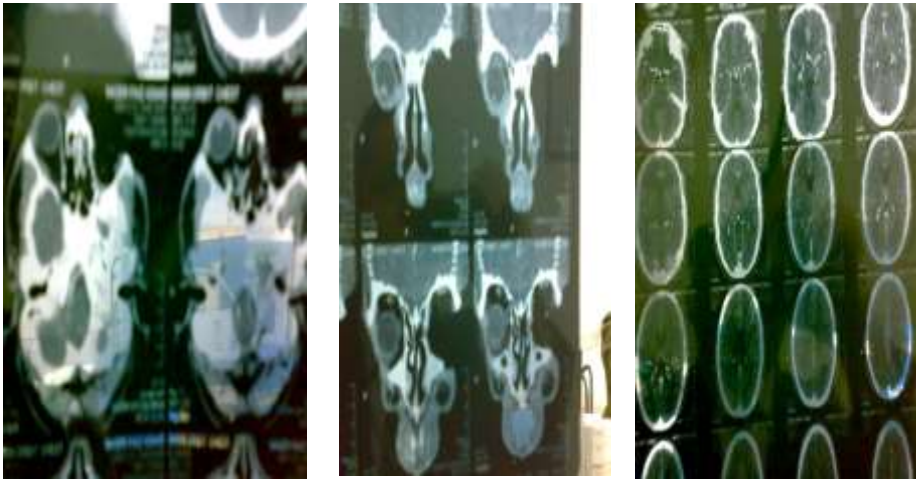
Significant nuclear pleomorphism marked eosinophilia from intracellular keratin(G3).

After 1 week

after 3 months



After 1 year(last metastatic work up)



After 2 years



Last update(2016)

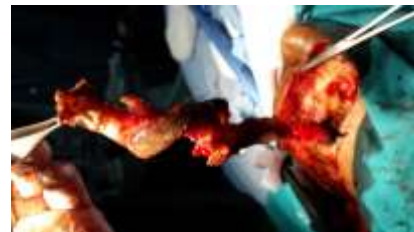
- He was alive 8.5 years from the initial surgery and called me from time to time.
- He did not come to my clinic for 3 years and refused to do any further cosmetic rehabilitation or metastatic workup.

Case 2 (2014)

- 60 years old farmer(prolonged exposure to sun).
- Vague history of eye removal.
- No investigations or pathology report.



2 weeks later



10 days later



He disappeared!!!!

Case 3 (2017)

- 62 years business man with history of enucleated eye one year ago and recurrent lid ulcer.
- He disappeared for 1 year when I told him that he should have exentration.
- He recurred when the ulcer increased in size and the diagnosis is proved by biopsy.



Pathology report(10/2017)

- Macroscopic picture showed 3 specimens 2,1,0.5 cm.
- Microscopic picture showed fibro fatty tissue infiltrated with tumour tissue. It showed groups of malignant squamous cells with moderate pleomorphism and hyperchromasia.
- Diagnosis : infiltrating squamous cell carcinoma grade 2. margins can not be assessed.

MRI shows 4,3.5,3 cm mass involving the whole orbital cavity without brain infiltration(8/2018).



3 weeks later(8/2018)



Follow up(9-10/2018)and reluctant to go to medical oncologist



Incisional biopsy (11/2018)



Debulking (12/2018)

- 5.5,5.5 cm soft tissue mass.
- Squamous cell carcinoma grade 2 infiltrating the bony orbit.



Finally

- He developed dyspnea with pleural effusion.
- Elevated liver enzymes and multiple hepatic focal lesions (metastatic) on ultrasound.
- Death on 1/2019.

Challenges

1. Patients:

Do not accept exentration.

Poor medical awareness.

2. Doctors:

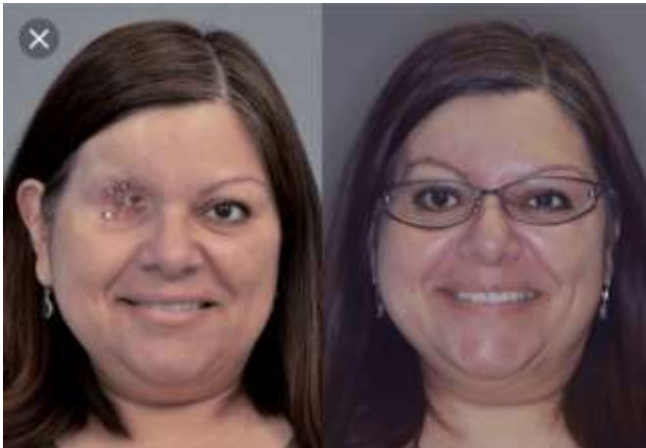
Some doctors are not decisive.

Lack of cooperation with medical oncologist.

- **3. Cosmetic rehabilitation** is not satisfactory.



Cosmetic rehabilitation



conclusion

- Eyelid SCC is a **relatively uncommon** but **potentially fatal** disease. If **detected early** and **treated adequately** the prognosis is excellent.
- Treatment by complete excision with histological confirmation of **free safety margin** is recommended.
- All patients should be aware of the risk of recurrence and encouraged to attend **lifelong follow up**.

- Thank you