Lid Mass Following Functional Endoscopic Sinus Surgery

Amr Mahmoud Awara, MD
Assistant professor of Ophthalmology
Tanta University
Close relation between nasal sinuses & Eyelids
Case # 1
Patient data

35 years old female

History

FESS followed by severe lid ecchymosis

improved leaving

C/O

chronic localized swelling in upper & lower eyelid noticed 4 months ago
Ipsilateral
Firm
Nodular
Non Tender
Mobile

Mass

Ocular Movement Normal
Surgical Excision with Histopathological Examination
Multiple fat cysts
Fat cysts surrounded by chronic inflammatory cells, histiocytes
Case # 2
Patient data

22 years old female

History

FESS followed by severe lid ecchymosis

C/O

chronic diffuse upper eyelid swelling
10 months later
Ipsilateral
Firm
Diffuse
Non Tender

Mass

Ptosis
MRI

T1 → soft tissue thickening
Surgical Excision with Histopathological Examination
Giant cells
Giant cells

histiocytes

Foam cells

Giant cells
Post-operative
Review of Literature
Paraffin induced sclerosing lipogranuloma of eyelids and anterior orbit following endonasal sinus surgery

British Journal of Ophthalmology
1994
Heinrich Witschel, Kathrin Geiger

- 10 patients

- Sclerosing lipogranuloma of the lid and orbit after endonasal sinus surgery with subsequent ipsilateral monocular haematoma.
<table>
<thead>
<tr>
<th>Case No</th>
<th>Age (years), sex</th>
<th>Complications of ear, nose, and throat surgery</th>
<th>Signs and symptoms</th>
<th>Time between ear, nose, and throat and lid surgery</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50, F</td>
<td>Injury to the orbital wall, monocular haematoma</td>
<td>Swelling of lids, ptosis, restriction of upward gaze</td>
<td>10 months</td>
</tr>
<tr>
<td>2</td>
<td>53, F</td>
<td>Bleeding from sphenopalatine artery, monocular haematoma</td>
<td>Swelling of right upper lid, ptosis, restriction of upward gaze</td>
<td>9 months</td>
</tr>
<tr>
<td>3</td>
<td>49, F</td>
<td>Left monocular haematoma</td>
<td>Swelling of eyelids, ptosis</td>
<td>6 months</td>
</tr>
<tr>
<td>4</td>
<td>44, M</td>
<td>Left monocular haematoma</td>
<td>Swelling of left eyelids, ptosis</td>
<td>14 months</td>
</tr>
<tr>
<td>5</td>
<td>48, M</td>
<td>Right monocular haematoma</td>
<td>Swelling of right eyelids, ptosis</td>
<td>4 years</td>
</tr>
<tr>
<td>6</td>
<td>35, F</td>
<td>Severe bleeding during puncture, monocular haematoma</td>
<td>Swelling of right upper and lower lid</td>
<td>3 months and 15 years</td>
</tr>
<tr>
<td>7</td>
<td>34, F</td>
<td>Right monocular haematoma</td>
<td>Swelling of right lower lid</td>
<td>4 years</td>
</tr>
<tr>
<td>8</td>
<td>24, M</td>
<td>Right monocular haematoma</td>
<td>Swelling of right lids, ptosis, restriction of upward gaze</td>
<td>17 months</td>
</tr>
<tr>
<td>9</td>
<td>59, M</td>
<td>Monocular haematoma left side</td>
<td>Swelling of left eyelids</td>
<td>6 months</td>
</tr>
<tr>
<td>10</td>
<td>50, F</td>
<td>Right monocular haematoma</td>
<td>Swelling of right eyelids</td>
<td>12 months</td>
</tr>
</tbody>
</table>
Figure 1  Sclerosing lipogranuloma (paraffinoma) of the lid 14 months after ear, nose, and throat surgery. ‘Swiss cheese’ appearance with multiple vacuoles surrounded by epithelioid and giant cells, foam cells, lymphocytes, and remnants of the orbicularis muscle. Haematoxylin and eosin, ×60.
The histopathological examination & MRI spectroscopic examination & typical clinical course

Conclusion

Granulomas were caused by small paraffin droplets.
Lipogranuloma of Eyelids after Paranasal Sinus Surgery

Mu Gon Son, M.D., Yoon-Duck Kim, M.D.


1999
Diagnosis and management of lipogranuloma of the eyelids from nasal endoscopic surgery. 2007 (Chinese Article) Guo Y

- 3 patients
- Medial orbital wall injury during endoscopic sinus surgery.
- Nasal packs petrolatum gauze for 1 day after surgery.
- Eyelid hematoma after surgery.
- Nodular eyelid mass 12-15 days after surgery,
- Antibiotic and corticosteroid for 1 month
- Surgical excision
- The histopathology → lipogranuloma.
In the Box
Conclusion

“Periocular petrolatum”
“Ointment granuloma"
“Orbital paraffinoma"

Ophthalmol Plast Reconstr Surg 2005
Eyelid Mass

☑ Ask about nasal endoscopic surgery ??
   Even if long time

Lipogranuloma

☑ Complete excision of best effective therapy
Think out of the Box
Moolchandani J, Kazim M, Farber M, Latowitz J.
Eyelid lipoid granuloma following topical ointment application.
Ophthalmol Plast Reconstr Surg 1990

Diffuse nodular eyelid lipogranuloma following sutureless transconjunctival blepharoplasty dressed with topical ointment.

Heltzer JM, Ellis DS, Stewart WB, Spencer WH. Ophthal Plast Reconstr Surg. 1999

Palpebral lipogranuloma caused by transcanalicular ointment injection after laser canaliculoplasty.


Fillers: Contraindications, Side Effects and Precautions

Journal of Cutaneous and Aesthetic Surgery 2010