

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



Lateral orbitotomy with and without bone flap

by

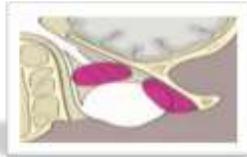
Ayman Abd'El Ghafar MD,

Assistant professor

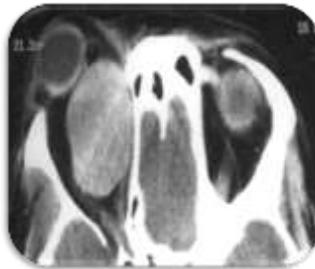
Mansoura University

➤ Approaches to orbital tumors depend on; location, size and suspicious nature of the lesion.

□ **Location of lesion:**



□ **Size:**



□ **Suspicious nature:**



Indications of lateral orbitotomy:

1. Intraconal Lesions superior, inferior and lateral to the optic nerve.
2. Total excision of lacrimal gland mass.
3. In combination with medial orbitotomy in large medial orbital lesions.
4. Balanced orbital decompression.

❑ *Assessment of proptosis:*

- Unilateral or bilateral.
- Degree of axial proptosis using Hertel's exophthalmometer.



- Horizontal and vertical displacement are measured using a ruler.



❑ *Ophthalmological examination :*

- Visual acuity.
- Lid examination for, localized swelling and redness.
- Cojunctival examination.
- Cornea, for exposure keratopathy.
- Pupil reaction.
- Fundus examination.
- IOP.
- Ocular motility.

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- Inspection the lids & palpebral lobe of the lacrimal gland.
- Palpation of the orbital rim and orbital lobe of the lacrimal gland.
- Retropulsion.
- Direction.
- Changes in the degree of proptosis.
- Detection of pulsating exophthalmos.
- Palpation of preauricular and submandibular lymph nodes.

❑ ***Investigations:***

➤ ***Radiological :***

CT and MRI

➤ ***Laboratory:***

- *Clotting and bleeding time.*
- *Complete blood picture.*
- *Liver and kidney function tests.*
- *Thyroid function tests.*

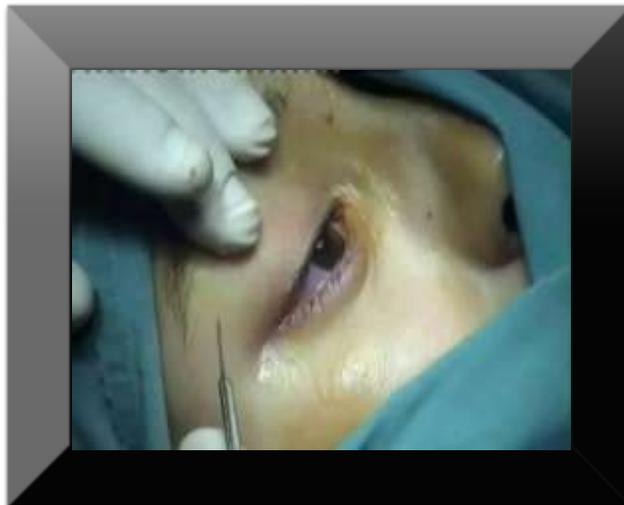
❑ ***Surgical techniques:***

- General hypotensive anesthesia.
- Patients were positioned in a reversed Trendelenberg position.
- Epinephrine 1:100000 is injected.
- The proposed site of the incision is marked.



- We used two types of incisions:

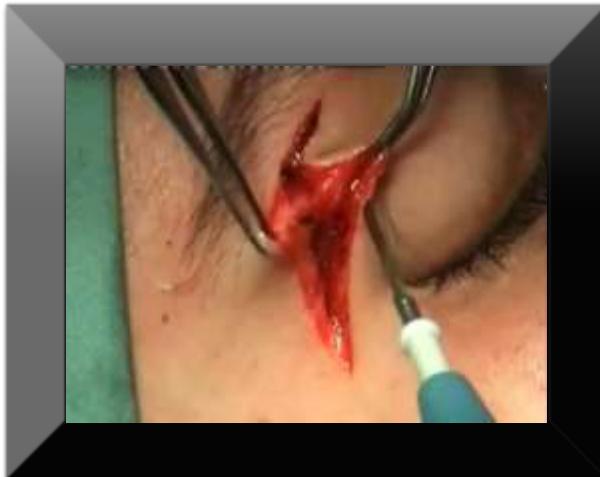
- ❖ *Lazy-S incision (Stallard-Wright).*



❖ *Extended upper lid crease incision.*



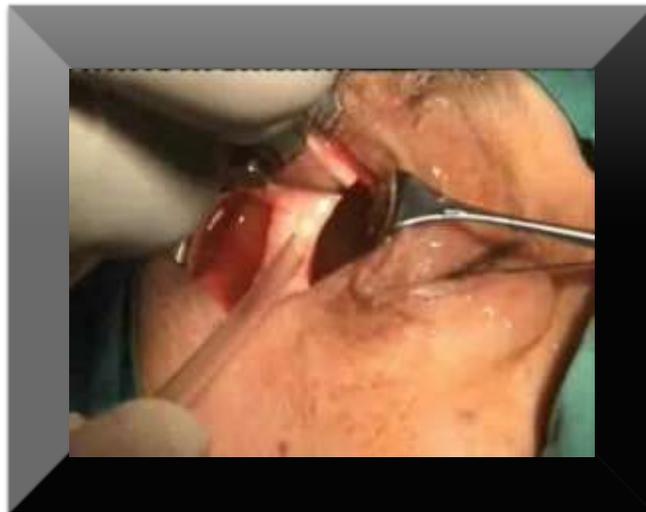
➤ **The periosteum on the lateral orbital rim was exposed.**



- The periosteum was incised 2 mm posterior to the lateral orbital rim.
- The anterior portion of the temporalis muscle was disinserted.



- **Bone cuts were performed.**



➤ **Two drill holes were performed.**



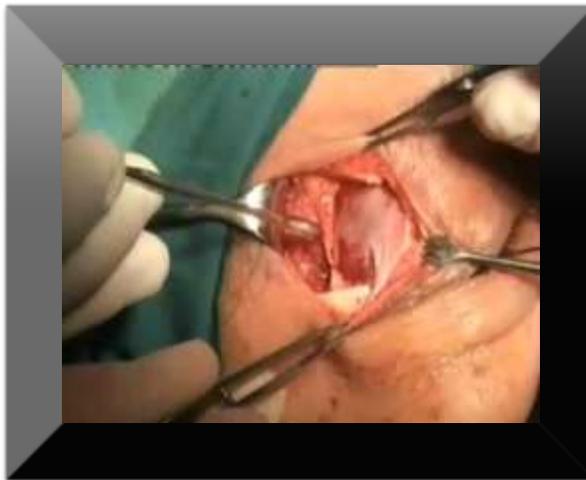
➤ **Out-fracture of the bone flap was performed.**



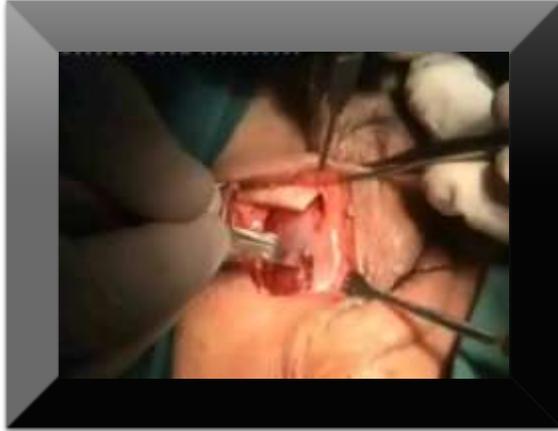
➤ **Out-fracture of the bone flap was performed.**



➤ **Identification of the periorbita.**

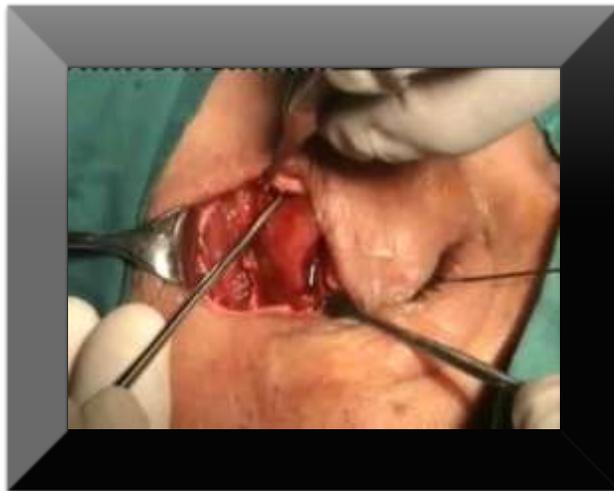


➤ **Incision of the periorbital in a T-cut manner.**

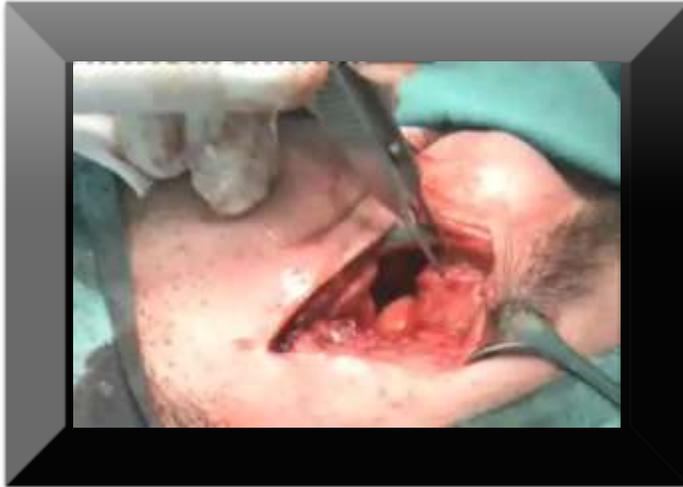


➤ **Excision of the mass:**

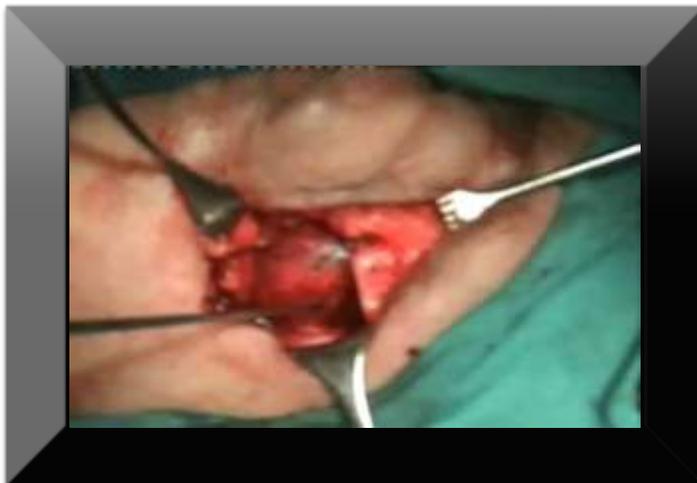
☐ **Lacrimal gland mass.**



Cavernous hemangioma:



Solitary neurofibroma:



❑ **Optic nerve glioma:**



- **After excision of the mass the orbit is explored.**
- **The periorbital is closed with absorbable sutures.**

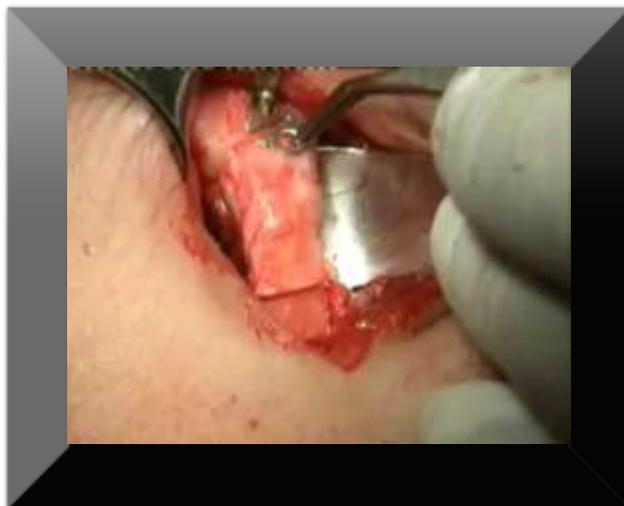


➤ Bone flap was repositioned:

➤ Polypropylene sutures 4/0.



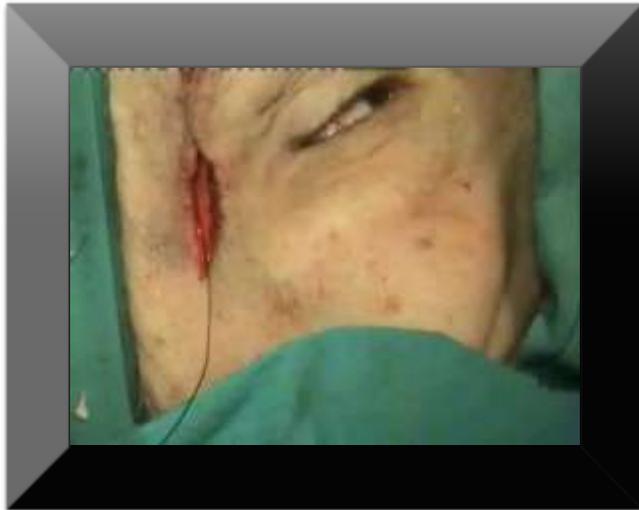
➤ Titanium microplates and screws.



➤ The periosteum and orbicularis are approximated on the lateral orbital rim using polygalactin 4/0 sutures.

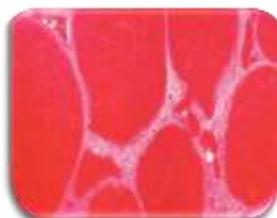
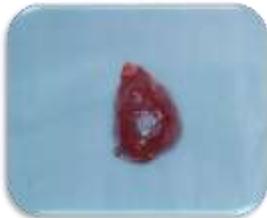
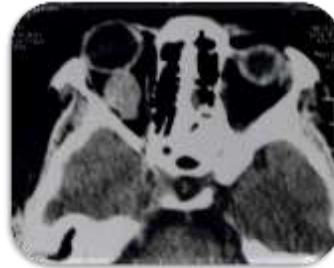


➤ The skin incision was closed with silk or polpropylene sutures 4/0.

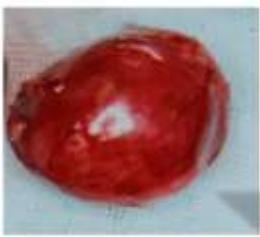
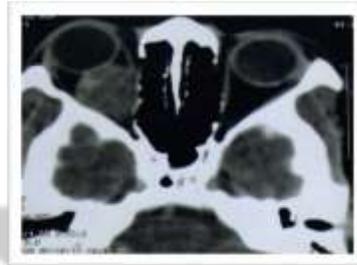


- No drain was used in any of the cases.
- Dressing was applied only to the wound.
- **Postoperative care and medications:**
 - Ice packs were applied.
 - Systemic broad spectrum antibiotics and steroids.
 - Skin sutures were removed after one week.
 - Follow up.

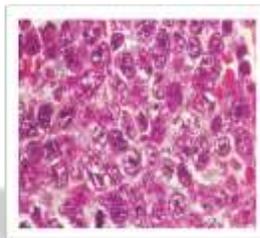
❖ **Cavernous hemangioma:**



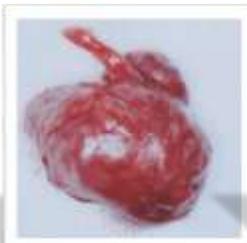
❖ **Solitary neurofibroma:**



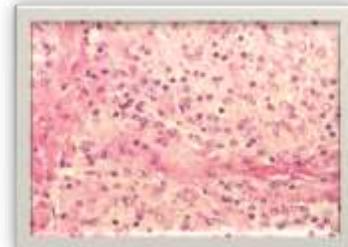
❖ **Primary orbital B-cell lymphoma :**



❖ **Benign mixed lacrimal gland tumor:**

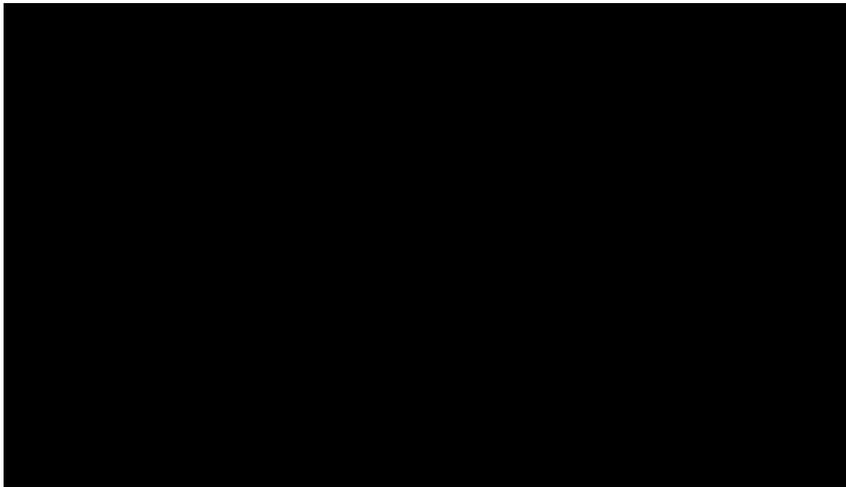


❖ **Optic nerve glioma:**



Lateral orbitotomy without bone flap”

- **The same steps but no bone flap.**
- **Can approach mid- and deep orbit.**
- **Suitable for compressible lesions.**





Thank you

