

Tips for success

for the use of the osmed tissue expander Sphere*

by PD Dr. med. Michael P. Schittkowski, Universität Göttingen



* also known as Tissue Expander Orbita

| Indications

- ↷ Expansion of the orbita at clinical anophthalmia
- ↷ Compensation of volume deficiency of the orbita
- ↷ Creation of a prosthesis counter bearing / support of prosthesis
- ↷ Augmentation of the palpebral fissure by pushing the prosthesis forward

| Contraindications

- ↷ Local infection of area of the conjunctival sac
- ↷ Extreme cicatrization of the conjunctival sac after presurgery (relative contraindication)

| Operative criteria

Well-proven is a beginning of treatment until the age of one year, preferably at the age of 4 months, at first with a conjunctival sac expander. After removal of conjunctival sac expander a prosthesis can be inserted and in the same anesthesia a orbita expander can be implanted.

| Anesthesia

Due to the age of the patient a general anesthesia is necessary.

| Implantation

1. Disinfection of the skin
2. Disinfection of the conjunctiva
3. Opening of the conjunctiva central dorsal, preferably horizontally along the palpebral fissure, max. 10 mm necessary
4. Predominantly blunt preparation of a sufficiently big implantation pocket
5. Insertion of the expander deep into the tissue
6. 2-layer closure, once of the tenon tissue with vicryl 4x0 EKN, once the conjunctiva with vicryl 6x0
7. Insertion of a shell shaped eye prosthesis
8. Finally a medial temporary tarsorrhaphy suture (e.g. 4x0 Greenfill or Prolene)

| Expander augmentation (-exchange)

1. Disinfection of the skin
2. Removal of the prothesis
3. Disinfection of the conjunctival sac
4. Opening of the conjunctival sac central dorsal, preferably horizontally along the palpebral fissure, max. 10 mm necessary.
5. Opening of the connective tissue capsule around the expander
6. Exposure of the swollen expander, fragmentation and removal in pieces, to limit the access to the size of the new expander
7. Opening of the expander capsule on the level of its equator circular
8. Insertion of the expander deep into the tissue
9. 2-layer closure, onces of the tenon tissue with vicryl 4x0 EKN, once the conjunctial sac with vicryl 6x0
10. Insertion of a shell shaped eye prothesis
11. Finally a medial temporary tarsorrhaphy suture (e.g. 4x0 Greenfill or Prolene)