

MoaBone® Natural Hydroxyapatite Surgical Implant Reconstruction Pack Surgical Guide

A Step by Step Guide to Correcting the Effects of Orbital Fat Atrophy

The normal appearance and functioning of the eyelids depends on the presence of a normal volume of orbital fat together with a normal sized eyeball (fig 1).

Enucleation of an eye followed by implantation of an **M-Sphere®** orbital implant produces an excellent cosmetic result when a prosthesis is worn since the volume of the **M-Sphere** implant and prosthesis together approximate the volume of the enucleated eye (fig 2).

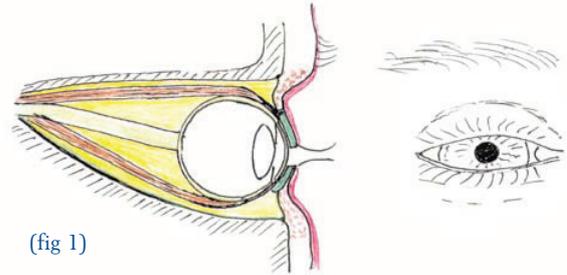
In many cases the underlying condition which led to the removal of the eye also produces atrophy of the orbital fat. Orbital fat cannot be replaced, unlike body fat elsewhere, so atrophy produces a permanent cosmetic defect with a deep hollow beneath the brow, posterior displacement and upward tilting of the prosthesis and an inability to close the upper eyelid completely (fig 3).

Surgical correction of the effects of orbital fat atrophy using the **MoaBone** Surgical Implant Reconstruction Pack involves the following steps:

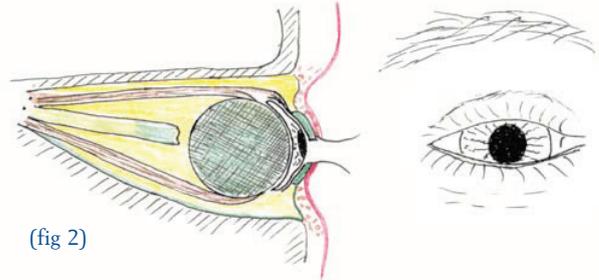
1. Incise the skin and orbicularis oculi muscle to expose the attachment of the orbital septum and periosteum to the infero-lateral orbital rim (fig 4).
2. Separate the loosely attached orbital periosteum from the bone to form a cavity extending up towards the apex of the orbit (fig 4).
3. Gently pack **MoaBone** segments, or pieces of segment, into this extraperiosteal space to displace the orbital fat forward. This in turn displaces the **M-Sphere** implant forward, filling the hollow beneath the brow.
4. Line up the fibres of the orbicularis oculi and close the skin with interrupted sutures (fig 5).

Points to note:

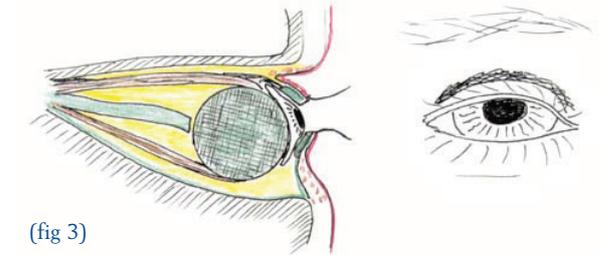
- If the patient wears their prosthesis during the procedure it helps the surgeon to judge the amount of correction that is required.
- **MoaBone** segments can be cut into smaller pieces to get the correct volume.
- It is important to be sure that the **MoaBone** segments are placed so that they do not interfere with the movement of the **M-Sphere** orbital implant, that is, they must all lie behind the 'equator' of the **M-Sphere** implant.



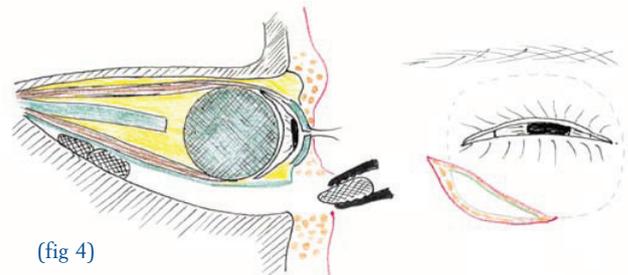
(fig 1)



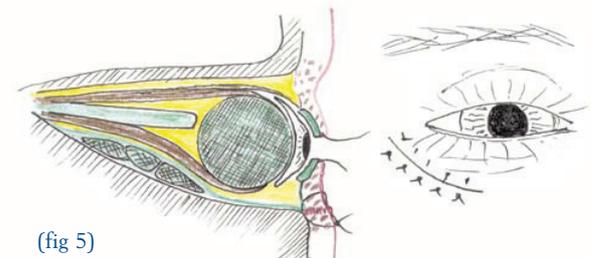
(fig 2)



(fig 3)



(fig 4)



(fig 5)



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