Perforated Coated Bio-Eye®
Hydroxyapatite Orbital Implant

The Best Gets Better

- Implant ready for muscle attachment
- Easy to suture muscles to implant
- Multiple choices for muscle attachment
- Decreased surgical time
- Easier to use than any other porous implant
- No wrapping material needed
- Coating engineered with variable absorption rates
The Perforated Coated Bio-eye® Hydroxyapatite Orbital Implant makes the world’s best orbital implant even better by making it easier to use, faster to implant, and a better value overall.

It has been recognized for over 25 years that coral-derived hydroxyapatite is the gold standard for orbital implant material. It is the only implant that is made of a natural material of the body and has the same micro architecture as human bone. It allows fibrovascular tissue to grow into the implant and for the implant to become a “living” part of the body.

The Perforated Coated Bio-eye® Hydroxyapatite Orbital Implant has perforations in the amber colored, anterior portion, of the absorbable polymer coating. This allows the surgeon to suture the rectus muscles directly to the implant. There are several different ways the muscles can be sutured to the implant.

Begin this procedure by preparing the eye for a standard enucleation. The objective is to isolate and tag the 4 rectus muscles. Tag each of the four rectus muscles with a double-armed 5-0 Vicryl suture with an S-24 needle. Tag the muscle about 5 mm from the muscle’s insertion to the globe. After weaving the suture through the belly of the muscle, 5 mm from the insertion, use a locking stitch on each edge of the muscle.

Mark the tendon of the muscle with a surgical marking pen prior to cutting the tendon from its insertion into the globe. This makes it easier to be sure this flap of tissue does not get folded under the muscle when the muscle is pulled up to the perforated holes and tied. Repeat this procedure for all four muscles. Once complete, proceed to enucleate the eye.

After the enucleation is complete, the opening in posterior Tenon’s capsule is widened by spreading with a hemostat. The socket is then sized with a sizing sphere to determine the proper size orbital implant. A sizing sphere larger than the size of the chosen implant is placed into the socket to help maintain the space for the chosen implant and to prevent swelling of the tissues of the socket.

Next, prepare the chosen implant by infusing it with an antibiotic and local anesthetic solution.

Because the implant is completely smooth, the implant will slide deep into the orbit as easily as a silicone or an acrylic sphere. The implant is placed deep into the orbit after the larger sizing sphere is removed. The posterior (purple colored) polymer goes in first and the anterior perforations can be oriented in various ways.

In the first method, the perforations are at 90°. The medial rectus is sutured to the implant by placing one of the needles through a corner perforation and then exiting out of the middle perforation. The other needle, attached to the other muscle edge, is passed through the opposite corner perforation and exits out the same middle perforation. Therefore each suture exits out of the same middle perforation.

In the second method, the perforations are at 45°.

The suture ends are tagged with a bulldog (Serrefine) clamp and not yet tied. Each of the rectus muscles is attached in this way before any of the sutures are tied.

Each of the muscles is then pulled up to perforations and the suture tied. The muscle tendons are then sutured to each other across the front of the implant. The tendon of the medial rectus is sutured to the tendon of the lateral rectus. And the tendon of the superior rectus is sutured to the tendon of the inferior rectus.

Tenon’s capsule is closed tightly in a separate layer using multiple interrupted 5-0 Vicryl sutures.

The conjunctiva is then closed in a separate layer using interrupted and running 5-0 Vicryl suture.

The speculum is removed and a conformer placed into the socket.

A temporary suture tarsorrhaphy is placed to prevent conjunctival prolapse.

The Perforated Coated Bio-eye® Hydroxyapatite Orbital Implant will provide your patients the most scientifically advanced orbital implant available. The design makes it easy for the surgeon to use and will decrease operating time.

Your patients deserve the best.