CUSTOM OCULAR PROSTHESIS PROCEDURES

- Patients affected area is examined to determine if the area is ready for any procedure (must be healed) in new enucleations. This also applies to replacement of old prosthesis.

- In new cases, an impression is required to duplicate the inter-ocular anatomy. This is accomplished by direct alginate impression materials.

- A mold is made of the impression and used as your base to form a shape that will metal parameters duplicate the volume of the empty orbit so to match the remaining eye. This procedure is done in wax.

- Trial fitting of the wax form is necessary to get the exact size and shape of the form.

- Center of the iris is marked on the wax form to ensure correct alignment of the iris angle in relation to the remaining eye. A pin indicator is attached to the form to maintain this position when the final pour of the mold is made.

- This iris is painted on a disc and a corneal clear button is then adhered to the disc to replicate the iris.

- Mold is opened and the wax and pin are removed. Mold is cleaned and separating fluids are applied to allow packing of scleral acrylic (methyl-methacrylate polymer), which is the material used to make the prosthesis.

- Scleral tinted acrylic is packed into the mold with the iris button in its position at the pin.

- Mold is pressure closed and cured in wet boiling heat. This form is removed and prepared to accept the coloring to match the natural eye by custom painting veining/modification applications.

- Form is dry-heat cured to accept the application of the clear corneal cove. Clear acrylic is applied over the painted form, pressed in the original mold, placed in a curing press and heat cured.

- Once cured, the prosthesis is removed from the mold, trimmed and polished for trial insertion of the eye socket. Any necessary adjustments can be made at this juncture for comfort, alignment and movement. Once you obtain comfort, coloring and movement, your prosthesis meets all its protocols.

- Patient is instructed on care and maintenance when the prosthesis is finally delivered.

- Once properly cured, the acrylic becomes inert and will not cause any allergenic reactions to the tissues.