Photographic Essay

Prosthetic conformers: a step towards improved rehabilitation of enucleated children

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ABSTRACT

Enucleation in children is distressing for families, particularly because of concerns of cosmesis. In the last 2 years the authors have used painted conformers instead of clear conformers to make the postoperative healing and rehabilitation period easier on the families. A set of six prosthetic conformers (small, medium and large; blue and brown) was available in the operating room. An appropriately sized and colourmatched conformer was placed in the socket at the end of surgery and kept for an average of 4-6 weeks. This decreased the psychological impact of enucleation, yet achieved the goals of an ideal conformer allowing optimal wound healing without pressure to fit a permanent individualized prosthesis earlier than 6 weeks after surgery. The acceptance of families to prosthetic conformers in this paediatric population has been very positive, improving rehabilitation of the family and the enucleated child.

Key words: conformer, enucleation, paediatric, socket.

PHOTO ESSAY

The prospect of enucleation in a child, whether for tumour, chronic eye disease or severe ocular trauma, is distressing for families. In our experience, the clear acrylic conformers used following enucleation allow wound visualization, creating an additional source of stress for the families. This has resulted in pressure to get a prosthesis fitted earlier than is optimal for wound healing. In the last 2 years, we have used a painted conformer and observed a decrease in the psychological impact of enucleation, with improved rehabilitation of the family. In addition, the children are more comfortable as it avoids the use of patches and tape on the skin to cover their conformer, and helps the family to wait for an appropriate healing period before the final prosthetic fitting.

The use of a conformer is important in protecting the wound and maintaining deep conjunctival fornices by

avoiding scar contracture.¹ Fenestrations in the conformer permit egress of any discharge in the immediate postoperative period preventing wound maceration. A permanent, individualized prosthesis is ideally fitted 6 weeks post-surgery to avoid unnecessary tension on the wound.²

The prosthetic conformers are manufactured as stock prosthetic eyes. They are available in the operating room in standard sizes (Table 1) with no specificity for left or right eyes. They have fenestrations and minimal anterior vaulting or protrusion. The current fitting set consists of six stock conformers constructed from lightweight acrylic resin in three paediatric sizes with either a blue or a brown iris (Fig. 1). The conformer is chosen that will slide in easily, fill

 Table 1.
 Dimensions of standard fitting set of prosthetic conformers

Dimension	6 11	Size (mm)	
	Small	Medium	Large
Height	20	21	22
Width	23	24	27
Thickness	3	3	3

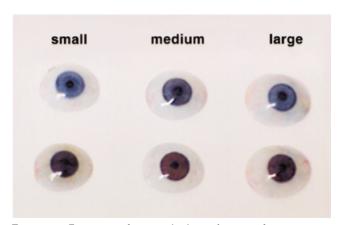


Figure 1. Fitting set of six standard prosthetic conformers.

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Figure 2. Paediatric patient (6 months) post-enucleation OS for retinoblastoma showing (a) bare socket; (b) prosthetic conformer; and (c) final prosthesis.

the fornices without being tight and allow lid closure (Fig. 2a,b). The role of the conformer and the cosmetic limitations of relative ptosis, enophthalmos and colour mismatch are explained to the family prior to surgery³

The acceptance of families to prosthetic conformers in this paediatric population has been very positive, improving rehabilitation of the family and the enucleated child (Fig. 2c).

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Source of prosthetic conformers: Webb Ocular Prosthetics, 170 George Street, Suite 707, Toronto, Ontario M5R 2MS, Canada.

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