Commentary: Assessing the results of anophthalmic prostheses

An ideal outcome of anophthalmic socket surgery depends on the volumetric outcome in terms of the superior sulcus deformity and the enophthalmos with prosthesis along with an excellent socket surface area that avoids lagophthalmos and allows for a well-retained prosthesis. Another factor that needs to be looked at is the presence of any eyelid abnormalities such as ptosis, lower eyelid retraction, and entropion that are commonly seen in anophthalmic sockets. The incidence of new-onset ptosis is close to 40% in patients with anophthalmos. It is also known that anophthalmic levator function is greater with an increased anterior projection of the implant and prosthesis. This makes it important for us to understand the concept of making scleral flaps during evisceration and ideal sizing of implants to achieve a symmetric fullness of the superior sulcus and avoid anophthalmic ptosis. Along with this, one of the most important factors that is sub-optimally addressed is the cosmetic outcome of the prosthesis itself. This puts an emphasis on the development of a metric to assess the aesthetic outcome of an anophthalmic socket incorporating all of these factors.

The article details quantifiable anatomical features and functional properties related to a successful cosmetic result in patients with ocular prosthesis and determine correlations between self-reported and third-party assessment of cosmetic success. The authors detail that the professional examiners associated good cosmetic results with the ability of the prosthesis to move in comparison to the contralateral eye, eyelid symmetry, and socket fullness. In contrast, the patients mostly rated their own cosmetic result as good according to the eyelid symmetry and prosthesis stability. The only parameter that correlated well between the patients and the examiners was sufficient conjunctival surface.

When compared to this series, data from Indian patients suggest that motility of the prosthesis forms one of the most important factors that patients are concerned about while undergoing socket surgery and fabrication of a prosthetic eye. This could partly be because the mean age of the patients undergoing socket surgery in India is roughly two decades younger than what is published in this article. This also brings out the need for socket surgery to be refined both in terms of technique and technology to match the patients’ expectations. While implantation of a 20 mm implant serves to give an excellent superior sulcus fullness in Asian Indian eyes, this cannot be achieved without incorporating surgical techniques such as 2 and 4 scleral flaps. Technological advances in manufacturing implants that might help increase motility without the need for pegging or a second procedure are the need of the hour.

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