

BRIEF INFORMATION ON SCLERAL CONTACT LENS

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INTRODUCTION

Scleral Contact lens rests on the sclera/conjunctiva and some part of the cornea also. It is the first contact lens which is discovered. It is too expensive compared to other contact lens. Scleral contact lensis also known as Haptic contact lens.

Especially Scleral contact lens are prescribed during high Keratoconus (where RGP is not stable on the cornea) and in Arthritis patients. In case of significant refractive error these lenses are advised to use.



Limiting factors of Scleral Contact lens are:

- a) Tolerance problem
- b) Sattler's veil
- a) Tolerance problem:

It means that it is quite intolerable after fitting of Scleral Contact lens but in case of High Keratoconus Scleral Contact lens is advice to use it.

b) Sattler's veil

The meaning of the Sattler's veil is edema of the cornea along with vision problem due to scleral contact lens.

TYPES OF FITTING

There are 2 types for fitting of Scleral Contact lens. They are:

- ♣ Preformed Technique (Trial fitting)
- **♣** Impression (Moulded)

Preformed Technique

It's a trial fitting. It can be divided according to Scleral Contact lens touch on the cornea/sclera.

a) Scleral Zone touch:

Here lens is touched on the sclera and corneal portion is in the vault way.

b) Optic zone touch:

The meaning of optic zone is corneal zone. Here, the lens is touch with the corneal zone only and scleral zone is not influenced by lens.

c) Integrated fitting

Here lens touches with the zone on the cornea/sclera and Transient zone.



Impression (Moulded):

It is a customized fitting. According to the patient's refractive error it is made.

ACCEPTANCE OF FITTING:

A. Flush fit

Here, haptic portion of the lens is parallel to the anterior part of the eye.

B. Semi sealed fit

Here haptic shell is modified. It means here Pre lens tear film (PLTF) can be able to pass through the haptic shell.

C. Ventilated fit

Here furrows are present in the haptic shell and in the scleral contact lens also.

D. Sealed fit

Nowadays it is not an acceptable fit.

REFERENCES:

- 1. IACLE Module 9, 1st (Edn).
- 2. Edward SB, Weissman BA (2005) Clinical Contact Lens Practice.
- 3. Mark J Mannis, Karla Zadnik, Cleusa Coral-Ghanem, Newton Kara-José (2006) Contact Lens in Ophthalmic Practice