

COMPLICATIONS OF RGP CONTACT LENS

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ABSTRACT:

This paper describes about complications of the RGP contact lens.

INTRODUCTION:

RGP contact lens offers significant physiological benefits of the cornea. It mainly occurs due to features of RGP contact lens material (good oxygen permeability)



and another is – the size of the RGP contact lens is lesser than corneal size. Due to this, during RGP contact lens wear, there may be less chances to create Hypoxia related complications.

<u>Always it should be remembered that solution of the RGP contact lens is different</u> (High Viscosity) as compared to Soft Contact lens solution.

Here I have discussed about the complication of the RGP Contact lens in below.

1. OCULAR REDNESS

It is a common complication of the RGP contact lens. But inherent Ocular Redness is quite different compared to RGP contact lens wear because during RGP contact lens wear ocular redness is present on the nasal and temporal portion. This ocular redness creates photophobia, foreign body sensation, mild ocular pain and watering of the eye.

It mainly occurs due to

- 3 and 9 O'clock staining
- Corneal edema
- 4 Pinguecula and Pterygium
- \rm Dryness

Treatment:

- ↓ Firstly, eliminate the cause
- ↓ For a transient period, cease the use of RGP contact lens wear

2. CONTACT LENS INDUCED PAPILLARY CONJUNCTIVITIS

It may be happen due to RGP contact lens. It is a very least complication of RGP CL. It occurs due to lens interaction between Contact lens and Conjunctiva.

3. 3 & 9 O'CLOCK STAINING

This complication is frequently occurring during RGP contact lens wear. Usually when PMMA material is used. But it should be remembered that if wearing time is reduced then 3 and 9 O'clock staining is being reduced. But there are chances to re occurrence. The meaning of the staining is, "Here epithelium is disrupted and when fluorescence is used, it become color".

It is associated with either infiltrated or Non-Infiltrated. The meaning of infiltration is deposition of the inflammatory cells. This staining may be associated with 3 and



5 O'clock staining and 5 and 7 O'clock staining. Usually it is asymptomatic and mainly occurs due to incomplete blinking.

Treatment:

- **4** Modify the wearing time
- **4** Cease the contact lens for transient period of time
- 4 Vitamin A eye drops
- **4** In some cases, advise to use soft contact lens.

4. CORNEAL DELEN

The meaning of Delen is thinning. In case of RGP contact lens wear, corneal Delen may occur. In this case, localized peripheral thinning is seen on the cornea. By the use of fluorescence, fluorescence pooling is seen on that Localized thinning area.

Treatment:

Cease the use of RGP contact lens for a transient (temporary) period of time.

5. CONTACT LENS ULCERATION:

It is a very rare condition of the RGP contact lens wear. Most of the time it is associated with 3 and 9 O'clock staining. It is more in the peripheral part of the cornea compared to central part of the cornea. Sometimes, it is also associated with Infiltration, Foreign body sensation, Redness and Watering.

Treatment:

Cease the use of RGP contact lens for a transient (temporary) period of time.

6. CORNEAL AND CONJUNCTIVAL STAINING:

It mainly occurs due to RGP contact lens wear. Due to the rigidity of this lens material, there are chances to damage the epithelial layer of the cornea and conjunctiva.



7. CORNEAL WARPAGE

There may be chances to become corneal warpage due to its material because rigidity of RGP contact lens is high compared to cornea.

8. PTOSIS

By the RGP contact lens wear, there may be chances to create Ptosis. It mainly occurs due to eyelid edema. Due to RGP CL wear there may be chances to become upper eyelid edema, so there are chances to develop Ptosis.

9. LENS FLEXURE

The meaning of the flexure is "When contact lens is placed on the cornea, then how much contact lens is blended". Sometimes lens flexure is present in RGP contact lens. It is an unwanted condition. But the good thing is it will stay only for a transient period of time.

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