

## **GPC – Giant Papillary Conjunctivitis**

Giant papillary conjunctivitis (GPC) is a condition where the inner surface of the eyelids becomes irritated and inflamed. In giant papillary conjunctivitis, large bumps (papillae), appear on the underside of the eyelid.

It is most commonly related to wearing contact lenses. GPC occurs both in patients who use soft and rigid gas permeable contact lenses, though it occurs much more frequently in soft contact lens wearers. The condition can appear at any time, even after many years of wearing contact lenses with no problems.

GPC will not harm your vision but it is annoying. It is difficult to cure, and can persist despite prolonged treatment. Often, the condition can be controlled so that contact lenses can be worn comfortably, even if it is not cured. In some cases, however, GPC becomes a chronic problem which can only be eliminated by discontinuing contact lens wear.

GPC is not an infection, but an inflammation caused by constant blinking across a contact lens or other foreign body. Normally, the undersurface of the upper eyelid is smooth like silk. In patients with GPC, the undersurface of the eyelid is roughened and inflamed, and the entire eye becomes irritated. In addition to this mechanical irritation, contact lenses also trap deposits on their surface, which add to the inflammation.

### **What causes GPC?**

GPC is thought to be caused by one or more of the following:

- allergic reaction to the chemicals used to clean contact lenses
- rubbing of contact lens against the eyelid
- deposits on the lenses

If you wear contact lenses and have asthma, hay fever or other allergies, you may be more likely to get GPC.

### **What are the symptoms of GPC?**

Normally, the underneath of your eyelid is very smooth. In the early stages of GPC, this area of the eyelid becomes rough, red and swollen. Then giant bumps (called papillae) form, and can grow larger than 1 millimeter (about the size of a pinhead) in diameter. Symptoms include:

- itching
- irritation
- burning
- appearance of mucous
- redness in some patients
- blurred vision (due to mucous sticking to the contact lens)

Some people with GPC also notice that their contact lenses tend to ride up on their eyes when they blink, as though the lenses were sticking to their eyelid. If it is not taken care of, GPC can damage eye tissue and the cornea (the clear front window the eye) as the large bumps underneath the eyelid rub against the eye. Many patients find that the symptoms are relieved once contact lens wear is discontinued, and that the symptoms return as soon as contact lens wear resumes.

### **How is GPC Treated?**

GPC may be treated by:

- Stopping contact lens wear for several days or weeks to let the irritation heal and disappear
- Using eye drop medicine to reduce swelling and itchiness
- Changing the type of contact lenses you wear
- Cleaning your contact lenses more frequently with enzymes
- Not using preserved lens solutions, and switching to unpreserved salt solutions
- Limiting the amount of time you wear your lenses each day

Once GPC is under control, some of the following steps may be helpful:

- Consider new contact lenses
- Use disposable contact lenses
- Change your lens care system
- Review proper lens care and storage instructions
- Limit contact lens wear

Eye drops are available that can be used for long-term control of inflammation. These drops may even be used while contact lenses are in the eye, though the life of the contact lenses may be shortened. During an active episode of GPC, you will probably need to return several times to monitor and adjust treatment.

Finally, you must assume that GPC is an ongoing problem. Periodic visits for examination will most likely be needed.