Recurrent Corneal Erosion Syndrome (RCES)

What is recurrent corneal erosion syndrome?
RCES is a condition affecting the outer surface layer of the cornea (the clear front window of the eye).

The surface becomes unstable and breaks down to form an erosion or raw area exposing the nerves that lie just beneath the surface.

What causes RCES?
- **As a result of an injury, e.g. a scratch to the eye**
  The original injury can be quite minor and may seem to heal in a few days, only to break down again at some time in the future, possibly repeatedly. There may be quite a long time between the injury and the recurrent erosion. The problem is that the new surface cells, which have grown across the injured area, have not bedded in strongly enough to the layer beneath. This means that the new surface is very easily dislodged, leaving a raw area which is extremely sensitive.

- **Corneal dystrophy (Map Dot Fingerprint Dystrophy)**
  Sometimes, there may have been no original injury. In these cases, the underlying problem may be slight irregularity of the growth of the corneal surface cells, causing an area of poor adhesion. This is called a corneal epithelial dystrophy.
Patient Information

What are the symptoms?
Typically, the symptoms which affect only one eye include:

- Severe pain (especially after waking)
- Watering
- Blurred vision
- Light sensitivity
- Dryness and irritation

These symptoms usually settle down as the day goes on, only to return first thing the next morning.

Treatment

- At first antibiotic eye ointment may be supplied, partly to prevent infection, but mainly for its lubricant effect.
- If the condition is seen at the acute stage (sudden onset of pain) the doctor in the eye clinic will remove the loose surface layer of the cornea and apply a bandage contact lens. This is a clear non-refracting soft lens which allows the corneal surface to heal properly. This will remain on the eye for about three weeks.
- Following this an eye ointment (sodium chloride 5%) is applied every night for at least six months. This ointment both lubricates and draws fluid out of the corneal surface.
- Sometimes artificial tears are also needed during the day. It is important not to stop the treatment too soon, or another erosion will occur, and the healing process has to begin all over again.
- If the condition is seen in the eye clinic between acute episodes of pain, the sodium chloride eye ointment is started straight away. This has a success rate of 50%
- If this is not successful surgical management may be needed. There are two types of surgery available and both have a success rate of over 80%:
  - **Alcohol delamination of the corneal surface.** This is a safe and effective treatment in which the alcohol allows the removal of the damaged corneal epithelium (the protective transparent skin of the eye) and allows for the re-growth of new healthy tissue.
  - **Keratectomy.** This is the removal of corneal tissue by corneal polishing with a diamond burr. This allows new tissue to regrow from new over the following five to seven days.
What is the long term outcome of RCES?

90% of cases resolve eventually, although it may take several months, and some patients continue to experience occasional early-morning foreign-body sensations in the eye for longer still. It is important to continue using lubricating ointment last thing at night for six months after all symptoms stop.

What do I do in case of an emergency relating to RCES?

Please contact UHCW Eye Casualty on 024 7696 6627

Monday to Thursday 8.30am – 4.30pm
Friday 8.30am – 4.00pm
Saturday 8.30am – 12.00pm

Outside these hours attend your nearest A&E Department where you will be assessed and referred on to an ophthalmologist if required.

If you have any further questions please contact: 024 7696 6606

The Trust has access to interpreting and translation services. If you need this information in another language or format please contact 024 7696 6602 and we will do our best to meet your needs.

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