Pseudomembranous conjunctivitis: unveil the curtain

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DESCRIPTION
Pseudomembranous conjunctivitis is an inflammatory condition of the conjunctiva characterised by mucopurulent discharge and pseudomembrane formation. A pseudomembrane is a thin yellowish-white membrane seen in the fornixes and palpebral conjunctiva that can be easily peeled off leaving an intact underlying epithelium. Corynebacterium diphtheriae, Neisseria gonorrhoeae, Streptococcus pyogenes and adenovirus are the commonly isolated micro-organisms in such cases. It is also seen in cases of acute Stevens-Johnson syndrome and ligneous conjunctivitis.

In our case, an 8-year-old girl presented with redness and watering in the right eye for 3 days. The visual acuity was hand motion and 6/6 in the right and left eye, respectively. Purulent discharge, conjunctival congestion with membrane formation was noted in the right eye (figure 1). The left eye was normal. A sloughing corneal ulcer was suspected and the treatment was started with hourly instillation of topical gatifloxacin 0.5% and tobramycin 1.3% along with topical homatropine four times a day. A conjunctival swab was taken and sent for microbiological evaluation. Marked decrease in purulent discharge with organisation of the conjunctival membranes was noted after 2 days of initiation of treatment (figure 2). S. pyogenes was isolated from the conjunctival swab specimen. The conjunctival membrane was peeled off under direct visualisation of the slit lamp. The frequency of topical antibiotic was reduced and lubricating eye drop was started. At 1-week follow-up, complete resolution of inflammation was noted with a visual acuity of 6/6 (figure 3).

Learning points
- Pseudomembranous conjunctivitis in severe cases may mimic sloughing corneal ulcer.
- Streptococcus pyogenes can be associated with pseudomembranous conjunctivitis.

Figure 1 Slit lamp image of the right eye at presentation showing purulent discharge with membrane formation and suspicion of underlying sloughing corneal ulcer.

Figure 2 Slit lamp image of the right eye after 48 hours of initiation of antibiotic therapy showing an organised conjunctival membrane with normal anterior segment.

Figure 3 Slit lamp image of the right eye after 1 week of membrane peeling.

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