

# The Sterile Corneal Post-Operative Melting Point - NSAID Induced Keratolysis After Cataract Surgery

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*Progressive sterile keratolysis is a rare yet potentially blinding condition after cataract surgery. Acute sterile corneal melt after cataract surgery is defined as: 1) occurrence of keratolysis within a month after cataract surgery, 2) absence of infection signs, and 3) appearance around paracentral cornea. Delayed detection in this 72 year old male*

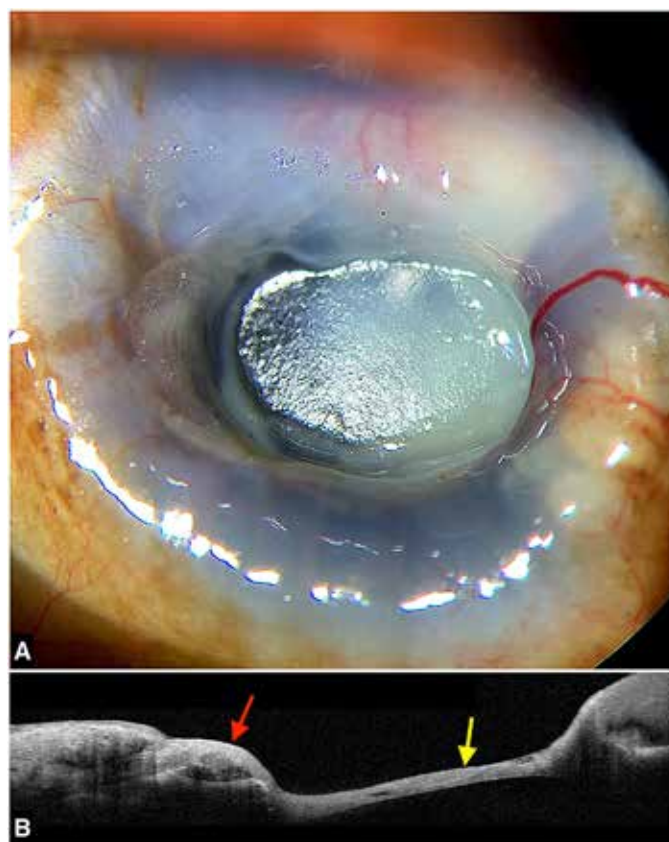
**Abstract** *with poor follow up after cataract surgery resulted in near total corneal melt. The presumable factor responsible here could be long-term usage of NSAID (Nepafenac 0.1% eye drops). Screening for both ocular (Sjogren's syndrome) and systemic risk factors (rheumatoid arthritis) is essential to prevent such condition.*

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A 72-year-old male patient presented with chief complaints of complete loss of vision in his right eye (OD) post uneventful cataract surgery performed seven months back. History of presenting illness revealed that he was apparently normal a year back, after which he developed defective vision due to cataract in OD, for which he was operated seven months back. After the uneventful surgery, he lost follow-up after the first two week post-op period, following which he had gradual progressive painless deterioration of vision for which he took local treatment and copiously utilised an NSAID (Nepafenac 0.1% eye drops) provided by a local pharmacy over the counter for his symptomatic complaint. He presented to us seven months later with complete loss of vision. On presentation he had a visual acuity of no perception of light with a soft eyeball progressing towards phthisis bulbi. Slit-lamp examination revealed near total sterile corneal melt with exposure of underlying posterior chamber intraocular lens with thin layer of epithelialisation over it (Figure 1). He had no history, signs or symptoms suggestive of trauma or infection. He was diagnosed with sterile keratolysis which progressed to near total complete corneal melt due to improper management and poor post-op follow-up.

Progressive sterile keratolysis is a rare yet potentially blinding condition after cataract surgery.<sup>1,2</sup> Acute sterile corneal melt after cataract surgery is defined as: 1) occurrence of keratolysis within a month after cataract surgery, 2) absence of infection signs, and 3) appearance around paracentral cornea.<sup>3</sup> In this scenario the paracentral corneal melt progressed into a near total complete corneal melt. It is frequently associated with preexisting tear-film abnormalities and dry eye disorders resulting from keratoconjunctivitis sicca, Sjögren syndrome, and collagen vascular diseases such as rheumatoid arthritis.<sup>4,5</sup> Timely preoperative vigilant recognition plays a major role in lessening this morbidity. Copious use of lubricants, punctum plug placement or lateral tarsorrhaphy performed at the time of surgery would help combat sterile corneal melt.<sup>6</sup> Also adjunctive use of a protective soft contact lens would help in fastening the healing process.



**Figure 1:** (A) Near total sterile corneal melt with exposure of underlying posterior chamber intraocular lens with thin layer of epithelialisation over it. (B) Optical coherence tomography revealing the same; cornea (red arrow); posterior chamber intraocular lens (yellow arrow).

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