

**DENSE CORNEAL BLOOD STAINING AND ITS
HISTOPATHOLOGICAL CHARACTERISTICS
-- A CASE REPORT**

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Purpose: To report the clinical course and the histopathological features of a case of severe corneal blood staining secondary to a penetrating eye injury.

Material and Methods: A case report.

Results: A 35-year-old man presented to our clinic with dense corneal blood staining in his left eye. The staining developed after a penetrating metal wire injury, which resulted in hyphema and a corneoscleral laceration in his left eye. Six months after the injury, penetrating keratoplasty was performed because of the presence of a large corneal scar and the persistently dense corneal blood staining. Histopathological examination of the removed corneal button showed pigmentary deposits dispersed within the Bowman layer to the anterior 2/3 of stroma. The posterior stroma was free of deposits. After performing penetrating keratoplasty, his visual acuity improved from only light perception to 0.2. Cataract surgery was performed 6 months after penetrating keratoplasty. After more than one year of follow-up, the corneal graft remained clear. The patient's uncorrected visual acuity was 0.3, and the best-corrected visual acuity was 0.8.

Conclusion: Our case highlights the histopathological features of corneal blood staining and its surgical management. Even though this condition can resolve spontaneously, penetrating keratoplasty may be necessary for restoring vision in severe cases, and facilitating detailed intraocular examinations.

Keywords: corneal blood stain, hyphema, histopathology

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