Novel sign to check wound leak intraoperatively: 'Bloody Seidel's'

Sudarshan Khokhar, Amber Amar Bhayana , Vimal Vashistha, Shorya Vardhan Azad

Ophthalmology, Dr Rajendra Prasad Centre for Ophthalmic Sciences, All India Institute of Medical Sciences, New Delhi, India

Correspondence to

Dr Amber Amar Bhayana;
amber.amar.bhayana@gmail.com

Accepted 14 October 2020

DESCRIPTION

We would like to describe a common observation as a new sign 'Bloody Seidel's'. Seidel's test, named after the German ophthalmologist Erich Seidel, is used to reveal leaks of intraocular fluid from the cornea, sclera or conjunctiva following injury or surgery. The principle of the Seidel's test is to apply a dye to the ocular surface so that any aqueous leak encompassed by the dye will dilute it, allowing the leak to become more obvious by the colour change. The dye commonly used is 10% sodium resorcinolphthalein (fluorescein).¹ A dye is used because otherwise transparent aqueous is difficult to spot leaking into transparent tear film. We thought of using another pigmented fluid for the same—that is blood. In case a limbal vessel is cut/damaged during anterior segment incision making, the blood leak from it guides us if the respective wound is secure.

Figure 1 (A) Blood actively trickling away from the wound indicating it is being actively washed by the fluid leaking from the wound; (B) Blood accumulating along the contour of the wound indicating that the leak has stopped.

Learning points

- ▶ Seidel's test is used to check leaks from the anterior chamber postsurgery or trauma.
- ▶ Any pigmented fluid like blood can act as similar marker and an alternative to externally applied dye.

In case of leak, the fluid from the anterior chamber keeps washing the blood oozing from the limbal vessel ([figure 1A](#)). If the wound is fluid secure, there is no fluid to wash off the oozing blood, as a result the blood starts accumulating along the contour of the wound ([figure 1B](#)). A good hydrated wound acts like a valve, preventing fluid movement either ways. So, we would like to propose this as a sign of whether a wound is fluid secure or not.

Contributors SK did the surgery and editing of manuscript. AAB contributed to the concept and preparation of manuscript. VV did video editing and retrieval. SVA also contributed to the concept.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Patient consent for publication Obtained.

Provenance and peer review Not commissioned; externally peer reviewed.

ORCID iD

Amber Amar Bhayana <http://orcid.org/0000-0002-0770-601X>

REFERENCE

- 1 Cain W, Sinskey RM. Detection of anterior chamber leakage with Seidel's test. *Arch Ophthalmol* 1981;99:2013.

© BMJ Publishing Group Limited 2020. No commercial re-use. See rights and permissions. Published by BMJ.

To cite: Khokhar S, Bhayana AA, Vashistha V, et al. *BMJ Case Rep* 2020;**13**:e239486. doi:10.1136/bcr-2020-239486

Copyright 2020 BMJ Publishing Group. All rights reserved. For permission to reuse any of this content visit <https://www.bmj.com/company/products-services/rights-and-licensing/permissions/>
BMJ Case Report Fellows may re-use this article for personal use and teaching without any further permission.

Become a Fellow of BMJ Case Reports today and you can:

- ▶ Submit as many cases as you like
- ▶ Enjoy fast sympathetic peer review and rapid publication of accepted articles
- ▶ Access all the published articles
- ▶ Re-use any of the published material for personal use and teaching without further permission

Customer Service

If you have any further queries about your subscription, please contact our customer services team on +44 (0) 207111 1105 or via email at support@bmj.com.

Visit casereports.bmj.com for more articles like this and to become a Fellow