Massive Subconjunctival Hemorrhage
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Abstract: An 83-year-old male presented with a non-traumatic subconjunctival hemorrhage in his right eye. He had undergone hemodialysis for a long time. The hemorrhage was confined to the temporal bulbar conjunctiva. The patient was followed without any treatment. Three weeks later, the subconjunctival hemorrhage had resolved. Clinicians should be aware that massive subconjunctival hemorrhage like hematoma may be associated with hemodialysis.

Keywords: Subconjunctival hemorrhage, Hemodialysis.

INTRODUCTION
Subconjunctival hemorrhage is a common eye disorder that is characterized by the sudden onset of a flat bleeding area under the conjunctiva [1-4]. Among older patients, it is well known that subconjunctival hemorrhage is associated with common systemic vascular disorders such as hypertension, arteriosclerosis and diabetes [2, 3]. Here, we report a massive subconjunctival hemorrhage in a patient who had hemodialysis.

CASE REPORT
An 83-year-old male who had been on long-term hemodialysis was referred to our hospital with a sudden onset of bleeding from his right eye during routine hemodialysis. (Figure 1A). The conjunctiva was also bulging and seemed to be hematoma (Figure 1B).

Fig-1: Photograph showing bleeding from the right eye and subconjunctival hemorrhage

Fundus examination of the right eye was unremarkable. The patient was followed without any treatment. One week later, the subconjunctival hemorrhage had gradually improved (Figure 2).

Fig-2: Slit lamp photograph showing gradually improved subconjunctival hemorrhage
Three weeks later, the subconjunctival hemorrhage had resolved and the conjunctiva improved flat (Figure 3). His visual acuities were 0.8 OD and 0.9 OS.

**DISCUSSION**

This report presents a case of massive subconjunctival hemorrhage observed in patient with long-term hemodialysis. Bleeding was presumed to have penetrating from the thinned conjunctiva with aging.

Spontaneous non-traumatic subconjunctival hemorrhage is frequently encountered in emergency and walk-in clinic visits. Cagini *et al.* [1] evaluated 10,090 patients visiting an emergency center. According to their report, a total of 1,184 (11.7%) patients had subconjunctival hemorrhage: in 86.7% it was spontaneous, in 13.3% consequent to trauma or to ocular surface disorders.

Mimura *et al.* [2] performed a study on risk factors for subconjunctival hemorrhage. Subconjunctival hemorrhage was most commonly observed to be caused by local trauma or contact lens-induced injury in the younger group and by hypertension in the older group. Mimura *et al.* [4] evaluated location and extent of subconjunctival hemorrhage. According to their report, traumatic subconjunctival hemorrhage had a smaller extent compared with subconjunctival hemorrhage related to hypertension, diabetes and hyperlipidemia, or idiopathic subconjunctival hemorrhage. In patients with subconjunctival hemorrhage secondary to trauma or diabetes, however, the temporal areas were affected more often than the nasal areas. In addition, subconjunctival hemorrhage showed an age-related increase in extent and was predominant in the inferior area.

**CONCLUSION**

Clinicians should be aware that massive subconjunctival hemorrhage like hematoma may be associated with hemodialysis.

**Disclosure**

The author declares no conflict of interest.

**REFERENCES**


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