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# **Massive Subconjunctival Hemorrhage** Shinji Makino\*

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## **Article History**

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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.



Fig-3: Slit lamp photograph showing resolution of subconjunctival hemorrhage

#### **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 to 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 subconjunctival hemorrhage. factors for Subconjunctival hemorrhage was most commonly observed to be caused by local trauma or contact lensinduced 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 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.

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