

# Cataract surgery in haemophilia



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## Introduction

Besides haemophilia elderly haemophilia patients will increasingly suffer from age related diseases.

A typical disease of the elderly is the development of cataract. Cataract is opacity of the lens of the eye, leading to partial or total blindness.

## Study objective

To document our current institutional practice and assess the bleeding risk of cataract surgery in patients with haemophilia A and B.

## Methods

All male haemophilia patients who were treated at the Van Creveldkliniek, a large Dutch haemophilia treatment center, at any time between 1985 and 2012 and underwent cataract surgery, were extracted from our patient database. For these patients, data on haemophilia type and severity, clotting factor correction during surgery, type of anaesthesia and bleeding complications were collected from patient files.

## Results

14 patients underwent a total of 19 surgical procedures for cataract of which 16 could be evaluated. Median age was 65 years (range 30-85 years). Baseline characteristics are summarized in table 1.

When anaesthesia through retrobulbar injection was given, a single infusion of clotting factor concentrates or DDAVP was given between 1-2 hrs before the procedure aiming at peak clotting factor levels between 0,80 and 1,00 IU/ml. When topical anaesthesia was given patients did not always receive clotting factor correction as this is not an invasive procedure.

Only one postoperative bleeding in the conjunctiva occurred in a patient with severe haemophilia A and a high titer inhibitor against FVIII who was treated with retrobulbar anaesthesia after a single dose of 50 U/kg aPCC. For the bleeding he was treated with aPCC for 5 days with good results.

	Haemoph. A	Haemoph. B	Total
Number of patients	13	1	14
- Severe (inhibitor)	3 (1)	1	
- Moderate	3		
- Mild	7		
Nr of procedures	18	1	19
- Severe ( 2 with inhibitor)	6 4	1	
- Moderate	8		
- Mild			
Median age (yrs) (range)	68 (30-85)	49	65 (30-85)
Type of anaesthesia			
- Retrobulbar	12	1	
- Topical	3		
- Unknown	3		

Table 1 Baseline characteristics of haemophilia patients who underwent cataract surgery

## Conclusion and recommendations

The risk of bleeding complications after cataract surgery is very low. Clotting factor correction is not required when topical or sub-Tenons anaesthesia is given in patients with FVIII or IX levels > 0.15 IU/ml. In case of retrobulbar anaesthesia clotting factor correction is given shortly before surgery aiming at levels between 0,80-1,00 IU/ml and trough levels 0.15 IU/ml for 24 hrs regardless of haemophilia severity. Topical anaesthesia is recommended to minimize retrobulbar and conjunctival bleeding. In patients with factor VIII/IX levels < 0.15 IU/ml undergoing topical anaesthesia, there are no data to support the need for or omission of clotting factor correction. We think that a single infusion with clotting factor aiming at top levels of 0.30-40 IU/ml will probably be sufficient to prevent bleeding.

Authors have nothing to disclose.

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