Haemaccel® as a Vitreous Substitute

(1) Observations in Rabbits (2) Clinical Results

J.A. Oosterhuis

(Published in ‘A.M.A. Archives of Ophthalmology’ 76: 258 and 374, 1966)

Discussion

Bleeker: Does speaker know how long Haemaccel remains present in the vitreous? For it is known that several compounds do not easily penetrate into the vitreous and that some of them are resorbed proportionally slowly from the vitreous after injection into the vitreous. Does speaker know whether during the presence of Haemaccel in the vitreous but after the increase in intraocular pressure and the swelling he observed about 9 h after injection of Haemaccel these signs persisted?

Oosterhuis: From animal experiments it appeared that 77% of the Haemaccel was still present the day after injection and only 22.5% on the 10th day. Further it appeared that in the course of 3 days 17% of the Haemaccel was broken down to smaller molecules by the proteolytic action in the vitreous. The increase in intraocular pressure and the decrease in anterior chamber depth have been registered as long as 24 h after injection of Haemaccel. For technical reasons it was not possible to continue the registration after this period.

Planten: Why use an incision to aspirate or drain subretinal fluid? Isn’t a perforation by means of a diathermy needle much safer and less drastic, by which method the hole remains open during injection of Haemaccel so that remaining fluid can still be expelled. Is the Haemaccel needle inserted with the aid of the ophthalmoscope to know the position of the needle tip?

Oosterhuis: Thank you for the suggestion to perforate the bulbus by means of a diathermy needle instead of an incision, by which method it might indeed be possible to remove the subretinal fluid to a larger extent and to obtain better reattachment of the retina. The site of injection of Haemaccel is carefully selected pre-operatively so as not to damage the opposite detached retina. Moreover a stop in the needle prevents inserting the needle too far into the eye. Further the needle is always inserted under ophthalmoscopic control by an assistant.