

Untoward Outcomes in 23 Gauge Vitrectomy Surgery

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Advantages:

Absence of suture-induced astigmatism, more efficient surgery, reduced risk for vitreous incarceration and enhanced postoperative recovery are well known advantages of the transconjunctival sutureless vitrectomy surgery. Thus, recently published results of larger series have demonstrated the high rate of severe operative complications including endophthalmitis and serous choroidal effusion.

Methods:

A retrospective chart review of 953 consecutive cases was done in order to assess the rate of complications after 23-gauge vitrectomy performed by four surgeons.

Effectiveness / Safety:

The endophthalmitis rate in our 23 G series was 0,21%, 5-fold higher as compared to 20 G vitrectomy (0,03-0,04%). The rate was comparable with other recently published reports (0,23%). The postoperative endophthalmitis after the transconjunctival sutureless vitrectomy could be prevented by a careful preparation of patients before surgery, better wound closure (bevelled incision, displacement of the conjunctiva, checking for wound leaks, suturing the sclerotomies in repeated surgeries) and a more complete vitrectomy. The postoperative serous choroidal effusion was a minor concern in our series with a rate of 0,3% and spontaneous resolution in all the 3 eyes. A good wound closure contributed to the 26-fold lower incidence than the recently reported (7,9%). Other complications that occurred included retinal tears in 5% of the operated eyes, retinal detachment in 3%, postoperative vitreous haemorrhage in 7%, and transient postoperative hypotony in 10% of the operated eyes. None of them influenced the final visual acuity.