

SYMPOSIUM: 25 GAUGE SESSION

Moderator: Murat Karacorlu

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25 Gauge vitrectomy – our initial experience

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Purpose:

To describe our initial experience and to evaluate the safety and feasibility of using 25 Gauge transconjunctival sutureless vitrectomy system for a variety of vitreoretinal procedures.

Methods:

Retrospective review of a consecutive interventional case series. 21 patients, including diabetic vitreous haemorrhage (10); CNV with break through vitreous haemorrhage (2); BRVO with vitreous haemorrhage (1); Eales disease (1); Retinal detachment (2); ERM (4); Macular Hole (1). 2 patients with follow-up less than 6 weeks were excluded. All patients underwent surgery using 25 G TSV. Operative time; visual acuity; wound integrity and complications.

Results:

The average operative time was 49 min. All patients had stable wounds. The pre-operative visual acuity was better than 6/36 in 2 patients (10.5%); between 3/60 – 6/60 in 4 patients (21.1%); and between hand movements – 2/60 in 13 patients (68.4%). Post-op, 9 patients (52.6%) had visual acuity between 6/6-6/12; 3 patients (15.7%) between 6/18-6/36; 3 patients (15.7%) between 6/60-3/60; 4 patients between 2/60 hand movements. The mean follow-up was 9.3 week (between 20 weeks). 3 patients developed recurrent vitreous haemorrhage. Both patient with retinal detachment developed recurrence.

Conclusion:

The 25 G TSV seems to be practical and safe for a variety of vitreo-retinal procedures. It has its limitations at least in patients with retinal detachment with proliferative vitreo-retinopathy. It definitely decreases operative time; post-op inflammation and has good results in selected vitreoretinal diseases.

Take home message:

Our limited experience has shown that 25 G transconjunctival sutureless vitrectomy yields excellent results in selected cases. Moreover with the increasing availability of better & wider variety of instruments for 25 G vitrectomy it will be able to replace routine 19 G vitrectomy for most of the cases.