The use of trypan blue during pars plana vitrectomy for diabetic tractional detachment decreases the risk of iatrogenic retinotomy

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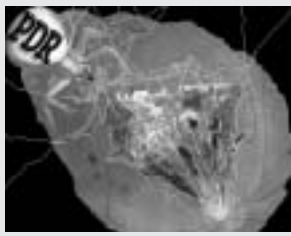

Purpose:
To evaluate the role of trypan blue usage during pars plana vitrectomy for diabetic tractional detachment on the incidence of iatrogenic retinotomy.

Methods:
The results of pars plana vitrectomy for diabetic tractional detachment were reviewed retrospectively in two groups each consisting of 16 eyes. The average follow-up was 7 (4 – 16) months. In the first group there was no use of any dye. In the second group fibrous membranes leading to tractional detachment were stained with trypan blue to enhance visualisation.

Results:
In the first group, without any use of trypan blue, iatrogenic retinotomies occured in 9 eyes (56%). In the second group there were only 4 eyes (25%) with iatrogenic retinotomy ($p \leq 0.05$). On the average there were 1.44 retinotomies/surgery in the first group and 0.56 retinotomies/surgery in the second ($p \leq 0.05$).

Conclusion:
The use of trypan blue during pars plana vitrectomy for diabetic tractional detachment decreases the incidence of iatrogenic retinotomy. Therefore the risk of postoperative complications decreases as well. However functional outcome is limited due to the retinal status related to diabetic retinopathy.

Take-home message:
The use of trypan blue for staining fibrous membranes leading to tractional detachment in diabetic patients can facilitate the surgical procedure and decrease the incidence of iatrogenic retinotomies.