Clinical Outcomes of Rhegmatogenous Retinal Detachment Treated with Pneumatic Retinopexy: an IRIS® Registry Analysis

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Purpose:
To report the clinical outcomes associated with rhegmatogenous retinal detachment (RRD) treated primarily with pneumatic retinopexy (PR).

Methods:
Data from the IRIS® Registry were queried for eyes that underwent PR for noncomplex RRD between January 1, 2013 and December 31, 2019.

Results:
A total of 22,304 eyes were identified. Single operation success (SOS) was achieved in 12,933 (58%) eyes. LogMAR best-corrected visual acuity (BCVA) differed (p<0.001) at 9-12 months post-operatively between the SOS group (mean=0.08) and failure group (mean=0.11). Among all patients, the mean time to maximal visual recovery was 270 days. Proliferative vitreoretinopathy (PVR) developed in 300 (1.4%) and endophthalmitis in 38 (0.2%) eyes. SOS was associated with female gender (OR 1.43), while positive smoking status (OR 0.70) was associated with failure.

Conclusions:
In this registry-based study encompassing a large number of PRs, SOS was achieved in 58% of eyes with noncomplex RRD.