Purpose: To present a novel method of sutureless silicon oil removal from the vitreous cavity. Methods: 44 pseudophakic silicone oil filled eyes entered the study. Subtenon’s anesthesia used. The conjunctiva was coagulated using a short tip external diathermy for Accurus (Alcon®) at high levels (80-90). Two sclerotomies were performed. The first was performed with a MicroVitreoretinal (MVR) blade (Alcon®), inferotemporal, under 300 angle and a 4mm Anterior Segment Maintainer (Dork®) placed to infuse fluid in. The second sclerotomy was performed at 12 hour, 1and 1/2 MVR Blade wide, starting 2mm posterior to the limbus and extended up to 3mm from the limbus, under 150 angle and then the blade pointed towards the posterior pole. The silicone oil removed trough a 16g needle. The sclerotomies closed, with a valve mechanism, without suturing. The time of the procedure, the post operative result (attached or re-detached retina), the post-operative silicon oil retention, the intraocular pressure, choroidal or severe subconjunctival hemorrhage, wound healing, infection and inflammation rate were evaluated. Results: Only one retina re-detached. One patient complained for retained silicon oil bubbles. No other complications were observed. The mean time of the procedure was 10min. Conclusions: Sutureless removal of silicone oil through a coagulated conjunctiva and self-sealed scleral tunnels is a fast and safe procedure.