

Internal limiting membrane peeling without the use of perfluorocarbon liquid for a macular hole associated with retinal detachment

Peeling da membrana limitante interna para tratamento do buraco macular associado ao descolamento de retina sem o uso de perfluorocarbono

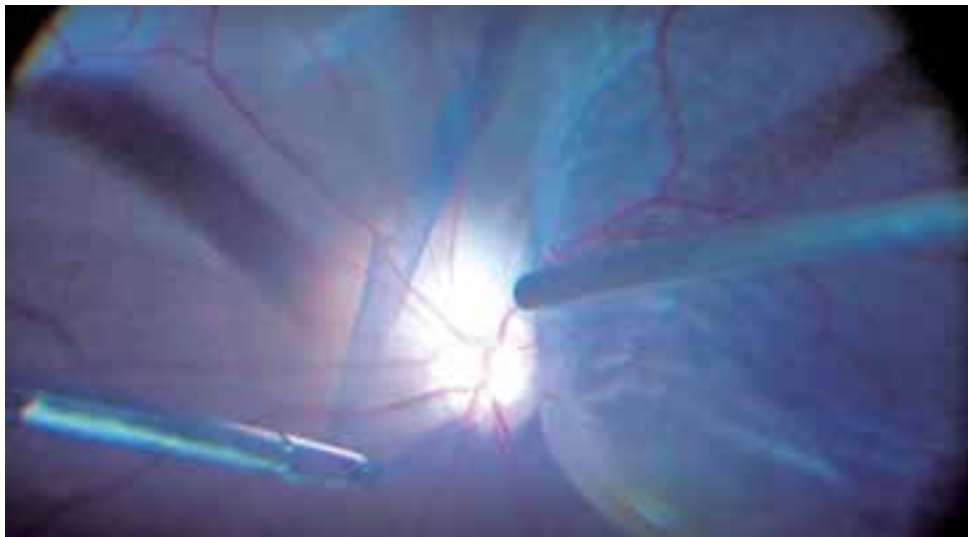
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The surgical management of macular holes associated with retinal detachment is usually more challenging than typical internal limiting membrane (ILM) peeling for an idiopathic macular hole^{1,2}. This can be attributed to the absence of counter contraction during the removal of the ILM in a mobile detached retina.

Perfluorocarbon liquid (PFCL) is valuable for stabilizing the posterior pole. However, PFCL use may make the initiation of ILM peeling difficult³. The choice of the technique depends on the surgeon's preference and experience.

We present a case of a 45-year-old female patient who experienced retinal detachment and a macular hole after blunt trauma. The patient underwent circumferential scleral buckling, followed by core vitrectomy and drainage of subretinal fluid through the retinal tear. This process aimed to flatten the retina in preparation for ILM peeling. Intravitreal triamcinolone was administered to facilitate identification of the posterior hyaloid. After detaching the posterior hyaloid, the subretinal fluid was drained through the retinal break. This process aimed to reduce the amount of subretinal fluid and thus reduce the size



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of the pocket at the posterior pole, which facilitates ILM peeling. Brilliant blue dye was injected around the macula, away from the macula hole.

ILM peeling was initiated using a pinch-and-peel technique with specialized forceps. Care was taken to create an initial break in the ILM, after which the peeling was performed tangentially, avoiding any anterior traction on the retina. It is preferable to begin the peel nasally to the fovea and extend it temporally, as performing the peel in the opposite direction in a detached retina is challenging. ILM removal in small strips was found to be beneficial for preventing excessive traction on the retina. For circumferential peeling, it is possible to use an illumination probe to hold the retina and reduce its mobility.

After completing the peeling, the vitreous base was shaved, followed by fluid-air exchange, endolaser treatment of the retinal break, and injection of C3F8 gas.

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