



PO 16 - VITREO MACULAR TRACTION SYNDROME: SURGICAL APPROACHES IN A TEACHING TERTIARY HOSPITAL

Diogo Bernardo Matos<sup>1</sup>, Nuno Pinto Ferreira<sup>1</sup>, Afonso Cabrita<sup>1</sup>, Rui Ferreira<sup>1</sup>, Emanuel Fernandes<sup>1</sup>, Miguel Santos<sup>1</sup>, Rafael Barão<sup>1</sup>, Mun Faria<sup>1</sup>, Carlos Marques Neves<sup>1</sup>

(¹Department of Ophthalmology, Hospital Santa Maria; Department of Ophthalmology Clinic, Faculdade de Medicina, Universidade de Lisboa)

**Purpose:** Vitreo Macular Traction (VMT) syndrome encompasses a wide spectrum of macular conditions whose diagnosis has been revolutionized by the introduction and development of Optical Coherence Tomography (OCT). According to the International Vitreomacular Traction Study Group (IVTS), VMT may be classified by OCT-based anatomical features and is thought to be part of a continuous disease with several stages. Surgical decision and surgical techniques remain controversial, and this paper presents several surgical techniques performed at Hospital Santa Maria – Centro Hospitalar Universitário Lisboa Norte for VMT syndromes who presented Macular Holes (MH) or Epirretinal Membranes (ERM).

**Methods:** Retrospective study including all patients with VMT syndrome who underwent surgical approach at HSM-CHULN between January 2022 and September 2022. Primary outcome was Best Corrected Visual Acuity (BCVA) change, whose data was collected at postoperative days 1, 7, 30, and 90. GraphPad Prism® 8.4.2 for Windows was used to perform statistical testing and creating tables and charts.

Results: Twenty-eight patients were included (53,6% female). Mean age was 69.62±8.9years. Average BCVA changed from 0.24±0.25 and 0.40±0.32 between pre- and post-operative status (p<0.01) when analysing all VMT who underwent surgery. Each complication-group (MH vs. ERM) presented statistically significant differences in BCVA. No statistically significant difference was found between BCVA results of the different MH surgical approaches (inverted flap [IF] vs. human amniotic membrane [hAM] plug).

Conclusions: Many different techniques remain functionally efective to address ERM's and MH's and their choice should rely on surgeon's experience although guidelines establish high-risk anatomical features for whom an additional technique such as hAM plug or IF plug should be taken into consideration. The strength of the several sub-analyses is underwhelming, mainly due to the small number of patients (n=28). Follow-up and enrolment of further cases alongside multicentric patient data sets would be beneficial to increase statistical and clinical significance.

Key Words: Foveoschisis; epiretinal proliferation; epiretinal membrane; macular hole; lamellar macular hole;