





Hospital Universitari MútuaTerrassa BARCELONA



BLOOD LOSS AND PROLONGED AIR LEAK REDUCTION BY APPLYING TENATAC® GELATIN PATCH AFTER MAJOR PULMONARY MINIMAL-INVASIVE RESECTION

Caroline Rivera (1); Cyril Perrot (2); Florence Mazères (1); Elodie Rive (1) (1) Department of Thoracic Surgery, Bayonne Hospital, Bayonne, France; (2) Medical Advices Consulting, Lëtzebuerg, Luxembourg

Introduction: Reduction of bleeding and prolonged air leak (PAL >5 days) following major lung resection remains a challenge. Hemostasis and aerostasis devices can facilitate earlier pleural de-drainage and fast-track. Our objectives were to evaluate the efficacy of TenaTac® (100% pharmaceutical gelatin device) in reducing bleeding after major lung resection and in reducing PAL.

Method: This monocentric retrospective case-control study, using prospectively collected data, includes 60 patients who underwent, between 2022 and 2024, minimally invasive robot-assisted lobectomy or segmentectomy: 30 with TenaTac® vs. 30 with other devices. Data were extracted from Epithor, our national database, with ethics committee validation.

Results: Patients characteristics, Index of PAL (IPAL) and surgical procedures were similar in the two groups (NS). TenaTac® hemostatic benefit was comparable to other devices (p=0.43). PAL rate was significantly lower with TenaTac® (3%) than for controls (37%) (p=0.002). Postoperative air leakage duration was significantly shorter in TenaTac® group than in control group (2.23±2.57 vs. 4.23±3.87 days, p=0.02). Mean drainage duration and length of stay were reduced with TenaTac® by 36 hours. No significant difference was observed between the two groups in terms of morbidity (90-day postoperative complications classified as Clavien-Dindo grade>II, p=0.33), readmission rates (nil) or 90-day mortality (no deaths).

Conclusion: Numerous hemostatic or aerostatic devices have been previously evaluated without achieving consensus in the prevention of PAL. Thanks to its characteristics of absorbable adherent gelatin, TenaTac® significantly reduces the incidence of PAL. Its ease handling and application make it an optimal subject for controlled prospective evaluation.