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"Uncommon Triad: Surgical Management of Concurrent Spigelian, Inguinal, and Femoral Hernias"

BACKGROUND: The simultaneous occurrence of Spigelian, inguinal, and femoral hernias is a rare and, to our knowledge, previously unreported clinical presentation.[1] This case report describes such a triad in a 74-year-old female with systemic lupus erythematosus (SLE), lupus nephritis, chronic obstructive pulmonary disease (COPD), rheumatoid arthritis, and heart failure with preserved ejection fraction (HFpEF), where chronic corticosteroid use and autoimmune disease likely contributed to hernia formation via fascial weakening.[2] Her surgical history includes a right ventral hernia repair with mesh in 2012 and a documented 5 × 2 cm left lateral abdominal wall hernia in July 2023, with recent presentation of persistent left-sided abdominal pain.[1] Preoperative computed tomography (CT) imaging revealed an 8.3 × 4.1 cm Spigelian hernia containing small bowel loops, suggesting a multifactorial etiology involving chronic corticosteroid use and SLE-induced tissue fragility.[3] We propose Robotic-assisted laparoscopic surgery offers a promising approach to address the diagnostic and therapeutic challenges of this rare triad.

OBJECTIVES: The primary objective is to describe the diagnostic complexities and surgical management strategies for concurrent Spigelian, inguinal, and femoral hernias in a high-risk patient.[4] We aim to enhance the understanding of this uncommon clinical entity and assessing the efficacy of robotic-assisted laparoscopic repair in optimizing outcomes for patients with significant comorbidities.[5]

METHODS: The patient underwent robotic-assisted laparoscopic transabdominal preperitoneal (rTAPP) repair using a modified transabdominal preperitoneal with extended view (TAPE) technique, following multidisciplinary clearance from pulmonology, endocrinology, rheumatology, and cardiology. Intraoperative exploration facilitated identification and repair of Spigelian, inguinal, and femoral hernias using synthetic mesh and peritoneal flap closure. Postoperative evaluation included monitoring for complications, recurrence, and recovery at short-term follow-up.[4]

RESULTS: Preoperative CT confirmed the Spigelian hernia, but intraoperative assessment via laparoscopic exploration revealed additional ipsilateral inguinal and femoral hernias, highlighting the limitations of imaging in detecting occult defects.[6,1] The robotic-assisted procedure was completed without intraoperative or postoperative complications. Short-term follow-up at 30 days showed no recurrence or wound-related issues, supporting the efficacy of the modified TAPE technique in this corticosteroid-dependent, high-risk patient.[3]

CONCLUSIONS: This case underscores the exceptional rarity of concurrent Spigelian, inguinal, and femoral hernias and the critical role of intraoperative laparoscopic exploration in their definitive diagnosis.[6,5] Robotic-assisted repair proved effective for this rare hernia triad in a comorbid, immunosuppressed patient, reducing complications and hospital stay, warranting prospective studies to optimize protocols for such complex cases.[7]