

Optimizing preoperative management of strangulated groin hernia: a single-center retrospective study

Domantas Juodis¹, Klaus Kienle¹, Bradshaw Nsioge Ediage²

¹Allgemein-/ Viszeralchirurgie Und Minimalinvasive Chirurgie, Rottal Inn

Kliniken - Eggenfelden (Germany),

²Allgemeine Chirurgie, Krankenhaus Bozen, Bozen (Italy)

Aim

Strangulated groin hernias are critical emergencies, with irreversible bowel ischemia occurring within 6 hours. This study evaluates the preoperative phase to identify areas for improvement.

Material & Methods

This retrospective study reviews 25 cases of strangulated groin hernias at a hernia center from 2015 to 2024, focusing on triage, preoperative time intervals, and surgical outcomes.

Results

A total of 25 cases of strangulated groin hernias were analyzed: 12 with inguinal canal hernias (8 males, 4 females, mean age 67 years) and 13 with femoral canal hernias (12 females, 1 male, mean age 79 years). In the emergency department, 14 patients were triaged as green (seen within 90 minutes) and 10 as yellow (seen within 30 minutes). One patient was transferred from another hospital's ICU. In Group 1, the mean time from arrival to surgery registration was 68 (27–197) minutes, and in Group 2, 116 (3–250) minutes. If the patient was seen immediately by the surgeon, the time was reduced to 45 min and 43 min respectively. The mean time from surgery registration to anesthesia was 119 (21–210) minutes in Group 1 and 72 (44–178) minutes in Group 2. Bowel resection was required in 7 Group 1 and 10 Group 2 patients, 8 of whom were initially triaged as green. Postoperatively, 5 patients died, including 2 from the green category.

Time Interval	Group 1	Group 2
Arrival to surgery registration (mean, range)	68 (27–197)	116 (3–250)
If seen immediately by surgeon	45	43
Surgery registration to anesthesia (mean, range)	119 (21–210)	72 (44–178)

Conclusions

This study highlights delays in managing strangulated groin hernias, especially in green-category patients. Prompt surgical evaluation reduced delays, emphasizing the need for better triage and faster intervention to prevent complications, potentially lowering morbidity and mortality.