Minimally Invasive Repair of Adult Morgagni Hernia: A Single Institution Experience

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BACKGROUND:

- The Morgagni hernia is a rare congenital diaphragmatic hernia that causes herniation of intra-abdominal content into the thorax.

- We describe our single institution experience with minimally invasive repair of Morgagni hernias, often in an urgent or acute setting.

METHODS:

- We performed a retrospective review of all patients who underwent laparoscopic or robotic repair of a Morgagni hernia at our center from 2012 – 2023.

- Patient demographics, presenting symptoms, and perioperative data were collected via chart review.

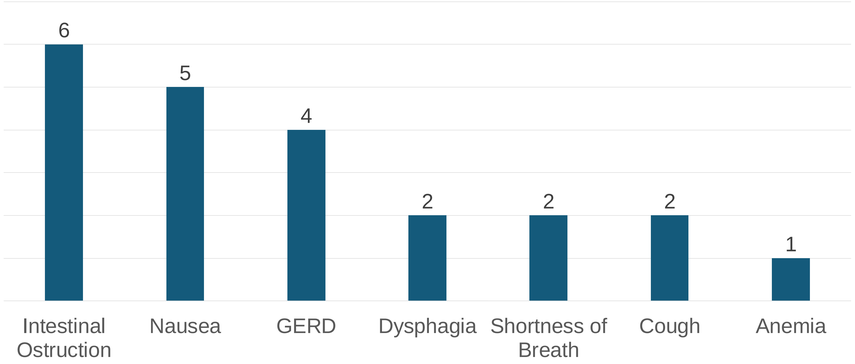


Figure 1: Presenting symptoms of patients who underwent Morgagni hernia repair, n=12.

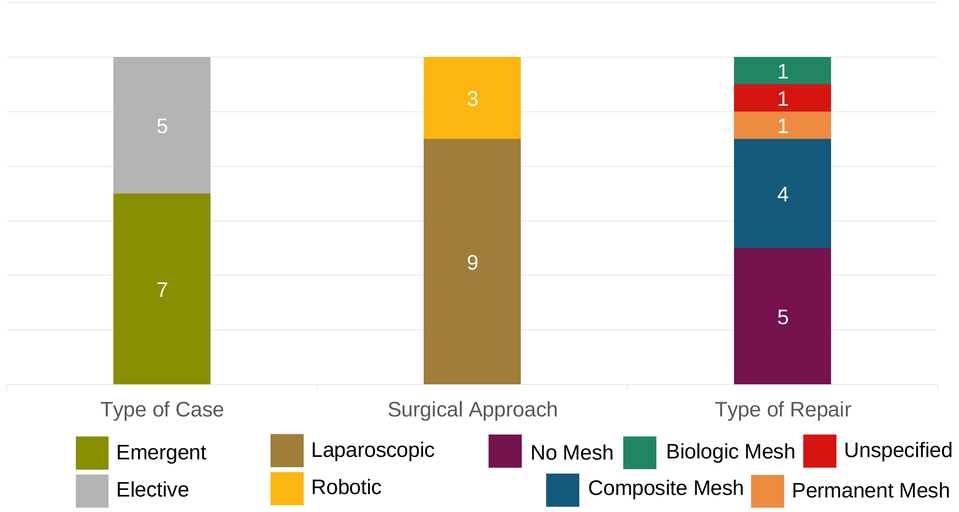


Figure 2: Type of case, surgical approach, and mesh utilization for Morgagni hernia repairs, n= 12.

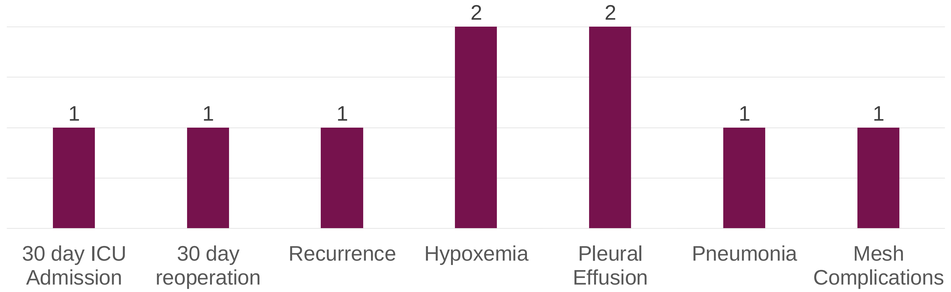


Figure 3: Complications of Morgagni hernia repairs, n= 12.

RESULTS:

- A total of twelve patients underwent minimally invasive Morgagni hernia repair. Eleven of these patients were female with a mean age of 59 +/- 1.6 years old.

- Half (n=6) of our patients presented with evidence of intestinal obstruction and required urgent surgery.

- Three-quarters (N=9) of our patients underwent laparoscopic repair, and the remaining (N=3) underwent robotic repair.

- Mesh was utilized in seven of the cases, with composite mesh in four cases, permanent mesh in one case, and biologic mesh in one case.

- One patient required an ICU admission complicated by pleural effusion, hypoxia, mesh infection, and reoperation within 30 days. Another patient's hospitalization was complicated by a pleural effusion and pneumonia.

CONCLUSION:

- Adding to the scarcity of literature, we present our institutional experience with minimally invasive Morgagni hernia repairs. We demonstrate that laparoscopic or robotic repair with and without mesh are safe in the urgent and elective settings.