EMERGENT ROBOTIC INCARCERATED LARGE SCROTAL INGUINAL HERNIA REPAIR

Bao-Ngoc Nasri, MD, PhD; Veronika Stefanishina, MD; Michael Zeimaitis, DO; Alex Barkan, MD, FACS

Richmond University Medical Center, Department of Surgery

BACKGROUND

- Large scrotal inguinal hernias represent a challenging surgical pathology.
- Although minimally invasive techniques have gradually expanded in the field of hernia repair, most surgeons elect the open technique for this type of hernia.
- The literature surrounding emergent robotic incarcerated large scrotal inguinal hernia repair (RSIHR) is scarce.
- We aim to present our results in a case series of robotic repair of large incarcerated scrotal inguinal hernia in an acute setting.

METHOD

- We reviewed the charts of 4 patients undergoing emergent RSIHR from 2019 to 2021 at a single academic institution.

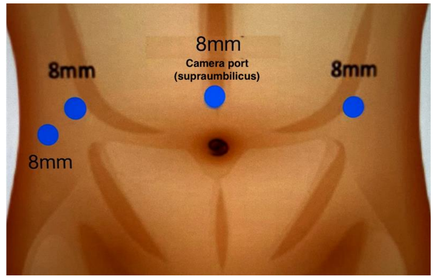
REFERENCES

- Bou-Ayash N, Gokcal F, Kudsi OY. Robotic Inguinal Hernia Repair for Incarcerated Hernias. *Journal of Laparoendoscopic & Advanced Surgical Techniques Part A*. 2021;31(8):926-930. doi:10.1089/lap.2020.0607
- Jamshidian M, Stanek S, Sferra J, Jamil T. Robotic repair of symptomatic Spigelian hernias: a series of three cases and surgical technique review. *Journal of Robotic Surgery*. 2018;12(3):557-560. doi:10.1007/s11701-017-0742-9

FIGURE 1



FIGURE 2



Arm 4, same side as hernia, for

RESULTS

- Patient population: male, mean age of 55, mean BMI of 32.4, at least one comorbidity with an ASA of 3 or 4
- The mean operating time was 147 minutes.
- Surgery: robotic transabdominal preperitoneal hernia repair (TAPP) with mesh, utilizing 4 arms for better retraction and reduction of the giant hernia. Division of conjoint tendon was performed in 2 cases to reduce the incarcerated content. Conjoined tendon was approximated with inguinal ligament using permanent suture. Permanent Pro grip and 3D max mesh with no fixation used.
- Intraoperative findings: 2 left and 2 right hernias. Hernia content was large and small bowel.
- Mean follow-up was 7.8 months. Mean length of stay was 4.6 days due to underlying medical conditions.
- Outcomes: No perioperative hematoma, seroma. Minimal immediate post-operative pain. No narcotics prescribed at discharge. Recurrence rate 25%.

CONCLUSION

- Incarcerated large scrotal inguinal hernias can be safely repaired using robotic-assisted TAPP methods with low morbidity and favorable outcomes.