# Robotic Plication of Rectus Diastasis: Preliminary Outcomes

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## Background

- Rectus Diastasis- weakening of the abdominal musculature and a widening of the linea alba.
  - Often misdiagnosed as hernias.
- Often diastases are plicated along with concomitant hernia repairs.
- Robotic plication is increasingly being used. Paucity of literature.

## Methods

- Small case series.
  - Robotic plication of abdominal rectus diastasis at a single institution between 2015 and 2019.
- Demographics, perioperative and short term outcomes were reviewed and descriptive analyses were performed.

## Results

- Eight patients met inclusion criteria for this study..
- 57% Female, 71% Caucasian, Average age of 52 years (range 33-78).
- All were plicated robotically with running barbed absorbable suture.
- Of the patients who had concomitant repaired umbilical hernias-
  - 33% of them were 1x1cm defects, 50% were 2x2cm defects
  - 17% were 4x4cm 'swiss cheese' type defects.
- 67% had synthetic mesh, 33% had biologic mesh placed.
- All mesh was fixated with transfascial sutures and absorbable tacks.
- All patients met 30 day follow up, maximum follow up of 2 years.
- There were no mesh related complications, evidence of hernia recurrence, or chronic pain.

## Discussion

- Small case series.
  - Would outcomes remain the same with a larger group?
- One patient did develop a port site hernia, which was repaired laparoscopically.
- Robotic plication of rectus diastasis could be an acceptable surgical approach.
- Further study is required.
- Which patients would most benefit from this type of repair?

## Conclusion

- Robotic approach is gaining momentum in use and indications.
- Is the time required for the robotic set up worth the added benefits from using the robot such as ergonomics and surgeon comfort?
- Could this be used as a combined approach with abdominoplasties?
  - Is there a trade off with cosmesis and functionality of repair?
- What are the long term outcomes of rectus plication?

## References

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