

# A Rare Case of Left Sided Acute Appendicitis in a Patient with Asymptomatic Malrotation



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#### Introduction

- Malrotation occurs when the bowel does not rotate the normal 270 degrees
- Patients range from being asymptomatic to needing emergency surgery for volvulus
- Malrotation is estimated to occur in 1 in 500 live births<sup>1</sup>
- If discovered in adulthood, midgut volvulus is unlikely to occur in patients with malrotation<sup>2</sup> and repair is not necessary

## **Case Presentation**

- We present a case of a 28 year old male who presented with periumbilical pain and nausea
- CT obtained in the ED showed malrotation with dilated and inflamed appendix on the left side of the abdomen (figure 1)
- The patient was taken to the operating room and found to have an inflamed appendix on the left side of the abdomen (figure 2,3), which we addressed by altering port placement with 2 midline and 1 in the right lower quadrant
- Post operatively the patient did well and was discharged home post operative day 1
- At two week follow up, the patient has been doing well with no complaints



Figure 1



Figure 2



Figure 3

# Discussion

- Our patient underwent laparoscopic appendectomy but we did not alter his anatomy as it had not caused him symptoms in the past
- It was decided to not perform any intervention other than appendectomy as the patient has not had any issues in 28 years<sup>2</sup>
- Pre operative imaging was very useful in out operative approach, as this was not a typical case of appendicitis, and tracing the bowel to ascertain the anatomy is crucial in making the diagnosis<sup>3</sup>

### Conclusion

 It is important to review all relevant information prior to operating as there are many anatomic variants that can alter operative planning

#### References

- Dilley, A. V., Pereira, J., Shi, E. C., Adams, S., Kern, I. B., Currie, B., & Henry, G.
   M. (2000). The radiologist says malrotation: Does the surgeon operate?
- Pediatric Surgery International, 16(1-2), 45-49. doi:10.1007/s003830050012
   Malek, M. M., & Burd, R. S. (2006). The optimal management of malrotation diagnosed after infancy: A decision analysis. The American Journal of Surgery,
- 191(1), 45-51. doi:10.1016/j.amjsurg.2005.10.002
   Ely, A. B., Gorelik, N., Cohen-Sivan, Y., Zissin, R., Carpineta, L., Osadchy, A., & Gayer, G. (2013). Appendicitis in adults with incidental midgut malrotation: CT findings. Clinical Radiology. 68(12), 1212-1219. doi:10.1016/j.crad.2013.07.001