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Medicine

THE ROLE OF LAPAROSCOPY IN IDENTIFYING AND SURGICALY SANCTIONING THE MECKEL DIVERTICULUM

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ABSTRACT:
MECKEL DIVERTICULUM IS ONE OF THE MOST COMMON MALFORMATIONS OF THE GASTROINTESTINAL TRACT, BEING RARELY ENCOUNTERED IN ADULTS (2%), AND ITS PREOPERATIVE FINDING IS A RARITY.
WE PRESENTED THE CASE OF A 24-YEAR-OLD PATIENT HOSPITALIZED WITH PAIN IN THE RIGHT ILIAC FOSSA, VOMITING AND SUB-FEBRILITY, SYMPTOMS THAT STARTED INSIDIOUSLY THREE WEEKS BEFORE HOSPITALIZATION. THE LOCAL EXAMINATION REVEALED A NORMAL ABDOMINAL CONFORMATION, SENSITIVE SPONTANEOUSLY AND ON PALPATION AT THE LEVEL OF THE RIGHT ILIAC FOSSA, WITH A SLIGHT TENDERNESS AT THIS LEVEL; NO OTHER SIGNS OF PERITONEAL IRRITATION.
AFTER PREOPERATIVE EXAMINATION AND PROPER PREPARATION, SURGERY IS PERFORMED FOR LAPAROSCOPIC APPENDECTOMY, BUT DUE TO LACK OF INSTRUMENTATION MEDIAN SUPRAPUBIAN LAPAROTOMY WAS DONE. THE POSTOPERATIVE EVOLUTION OF THE PATIENT WAS FAVORABLE, SO WE DECIDED TO DISCHARGE 6 DAYS LATER.

KEYWORDS: MECKEL DIVERTICULUM, LAPAROSCOPY, APENDICETOMY

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INTRODUCTION

Meckel diverticulum is one of the most common malformations of the gastrointestinal tract, being rarely encountered in adults (2%), and its preoperative finding is a rarity. It is most often discovered intraoperatively during appendicectomy.

Video inspection during laparoscopic interventions increased the number of cases of Meckel diverticulum detected.

There is no consensus regarding the surgical sanction or not of the asymptomatic Meckel diverticulum accidentally discovered, as opposed to its symptomatic forms that always benefit from surgical treatment.

Objective

By presenting the following case, we would like to emphasize the importance of the systematic search of the Meckel diverticulum during appendectomy and the contribution of laparoscopy in its discovery.

Material and method

We presented the case of a 24-year-old patient hospitalized with pain in the right iliac fossa, vomiting and sub-febrility, symptoms that started insidiously three weeks before hospitalization, and determined the patient to go to the Emergency Department of the SCJUC where she received antibiotic treatment.

After a week in which the symptoms remitted under the treatment performed, the pain reappeared this time with localization in the right iliac fossa and mesogastrium, which is why the patient is admitted to the Surgery IV Clinic, Hospital CF Craiova. The local examination revealed a normal abdominal conformation, with the normal adipose tissue, mobile with the respiratory movements, sensitive spontaneously and on palpation at the level of the right iliac fossa, with a slight tenderness at this level; no other signs of peritoneal irritation, no detectable tumor formation. Laboratory analyzes did not reveal any changes, and the ultrasound revealed only a medioseptated gallbladder.

After preoperative examination and proper preparation, surgery is performed for laparoscopic appendectomy. Intraoperative there is discovered a descending mediocecal appendix with congested serous layer, and at about 70 cm from the ileocecal valve there is discovered the Meckel diverticulum, 5-6 cm long, with a wide implantation base, with a budded top, slightly congested.

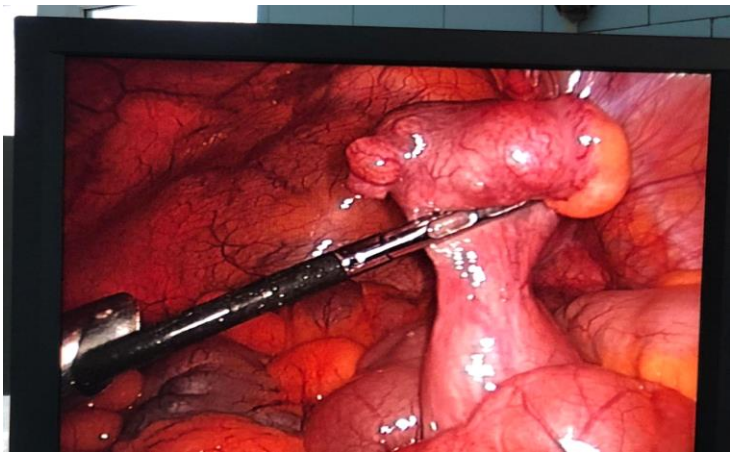

Figure 1. Buded, congested appearance of the Meckel diverticulum

Due to the lack of laparoscopic instrumentation (laparoscopic resection of the Meckel diverticulum) and the linear stapler for minimally invasive surgery, it is decided to convert the intervention into a classic one. Median suprapubian laparotomy is performed, intraoperative exploration confirming those seen previously.

Figure 2. Diverticle with inflamed serous layer

Figure 3. Intraoperative appearance of the Meckel diverticulum

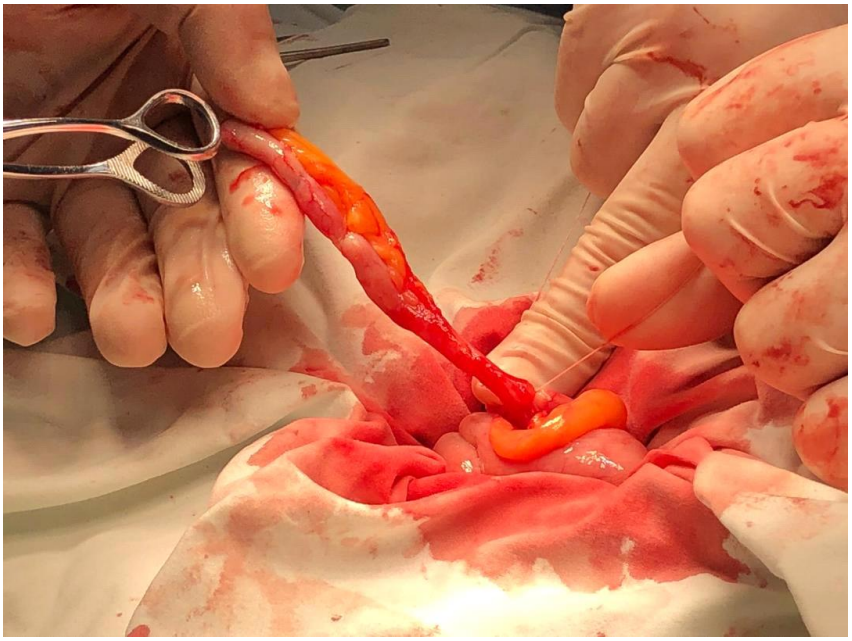

Figure 4. Intraoperative appearance of the appendix and its ligation at the base

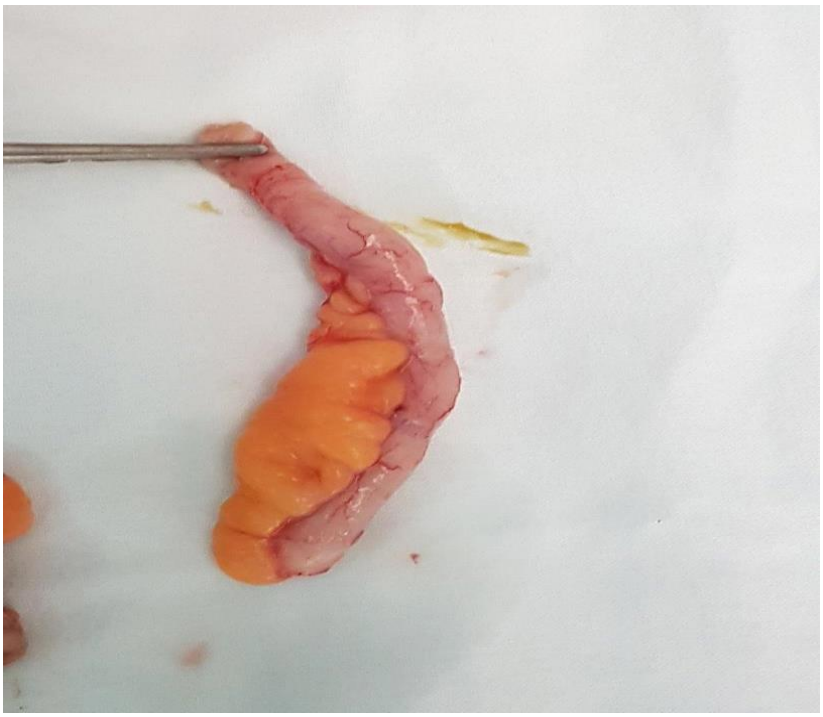

Figure 5. Histopathological part - congested appendix, about 15 cm long

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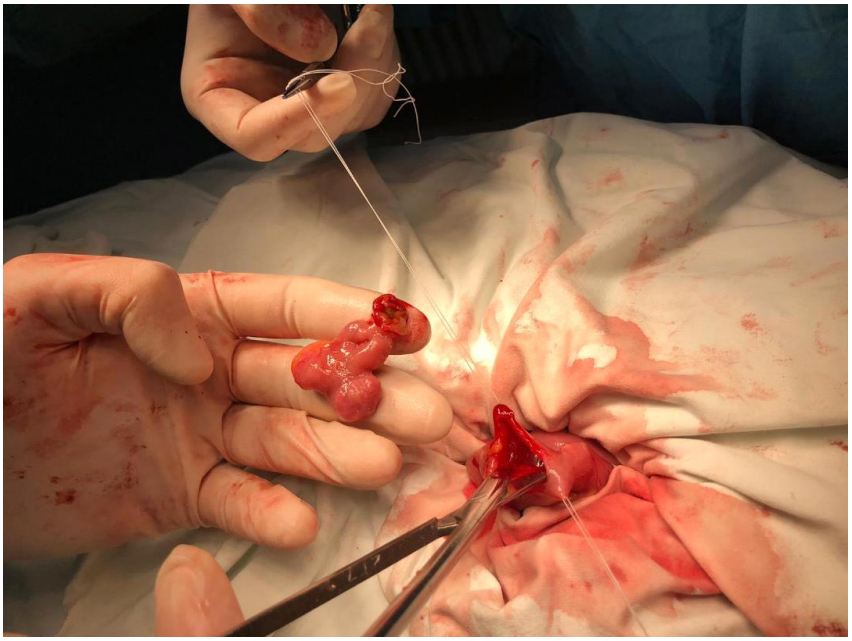


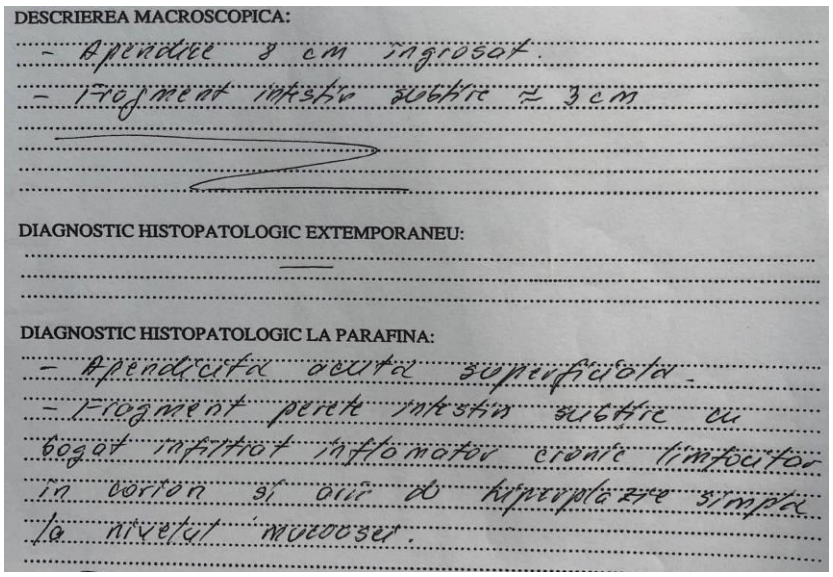
Figure 6. Meckel diverticulum excision

Figure 7. Transverse suture of the intestinal breach

Figure 8. Post-operative parts (appendix + Meckel diverticulum)

The postoperative evolution of the patient was favorable, with elarly renewal of the intestinal transit (after 72 hours), and suppression of the drainage tube after 3 days; locally the evolution of the wounds was favorable. The patient is discharged 6 days postoperatively.

At 21 days after surgery, the intraoperative diagnosis is confirmed by the result of histopathological examination on paraffin.



DESCRIEREA MACROSCOPICA:

- Apendice 8 cm ingrosat.
- Fragment intestin subtire ≈ 3 cm

DIAGNOSTIC HISTOPATOLOGIC EXTEMPORANEU:

DIAGNOSTIC HISTOPATOLOGIC LA PARAFINA:

- Apendicita acuta superficiala.
- Fragment perete intestin subtire cu bogat infiltrat inflamator cronic limfocitar in corion si arie de hiperplazie simpla la nivelul mucoasei.

Figure 9. HP bulletin

CONCLUSIONS

We are in favor of surgical excision of the Meckel diverticulum discovered intraoperatively, whether or not it has an infliction. We consider that by surgically

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approaching the Meckel diverticulum from an asymptomatic stage, we protect the patient from any possible complications.

The benefit of laparoscopy brought through the wide field of vision allowed the identification of the Meckel diverticulum that may have escaped undiagnosed in the case of a small laparotomy in the right iliac fossa performed for appendectomy.

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All authors had the same contribution.

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