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RESEARCH ARTICLE

REMOVAL OF JACKSON PRATT DRAINAGE THROUGH WOUND EXPLORATION

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ABSTRACT

Introduction: The Jackson drainage was used to treat subdural hematomas and is currently used in multiple surgeries, this drainage is composed of a soft silicone tube, designed not to absorb tissues.
Clinical case: A 42-year-old female with no history of chronic degenerative diseases, previous surgical procedures were placed Jackson Pratt drainage in abdominal cavity, later when removing the drainage, this presents difficulty and pain, evidencing exteriorization of the omentum in the light of the drainage, what was decided to perform wound exploration and removal of the drainage, then the patient progressed satisfactorily, she graduated 24 hours later and management by the outpatient clinic.
Conclusion: Closed drainages are an important tool for the management and surveillance of surgeries, however, there is a possibility that these drains present adhesions, be fixed accidentally or present intra-abdominal contents.

INTRODUCTION

The drains have been used in surgery for several years to eliminate fluids from the body thus preventing the accumulation of the same and thus improve wound healing, can be classified as closed or open systems, activate or deactivate depending on their expected function (Durai *et al.,* 2009). Closed vacuum drains can be used as a sealing system, tissue preparation and moisture removal, can be sublimated as high and low pressure drains, these vacuum drains are efficient, allow easy control and safe disposal. Low pressure vacuum drains are used to control excess fluid and air, are easy to use and can even be handled at home by the patient, since it is easy to restore vacuum pressure. Neurosurgeons from North America Jackson and Pratt reported that the drainage performance that could be used for subdural hematomas and is currently used in multiple surgeries, this drain is composed of a soft, flexible silicone tube with multiple perforations along each side, with a pump that is used to recreate the low negative pressure vacuum (Jackson and Pratt, 1971).

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CASE REPORT

A 42-year-old female with no history of chronic degenerative diseases, operated on laparoscopic appendectomy 96 hours before, in which phase II appendicitis was evidenced, later with a torpid evolution that required surgical reoperation again by laparoscopic approach at 48 hours, due to presenting data of peritoneal irritation and suspicion of bleeding due to the presence of free fluid in the abdominal cavity using computed tomography, as findings of this second intervention only inflammatory reaction fluid was found approximately 200 milliliters, without localizing bleeding site or hematoma, Jackson Pratt drainage was placed directed to pelvic cavity, 48 hours later it was decided to remove drainage, however when performing the traction, this presents resistance and at the same time the patient refers intense pain, again try removal by traction and evidence of externalization of omentum in the light of drainage (Figure 1), so it is decided to move to the operating room for removal. Technique and findings: Prior anesthetic procedure, asepsis and antisepsis was performed, exploration of exteriorization site of Jackson Pratt was carried out, the presence of omentum inside the light and fenestrae of the drainage was confirmed, so that the light of the drainage and omentum is freed (Figure 2), then a partial omentectomy is

performed, it is verified that there is no bleeding site and wound closure is carried out by planes (Figure 3).

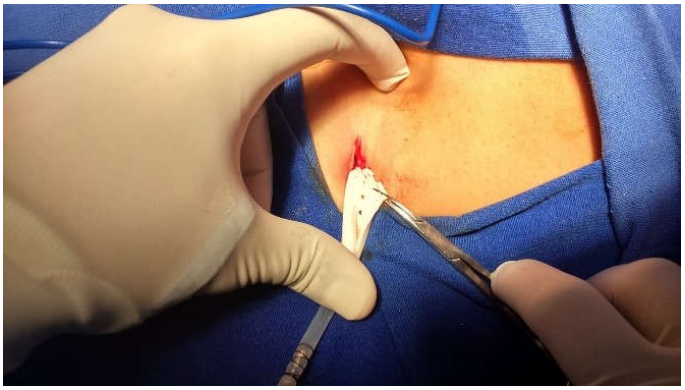

Figure 1. Jackson Pratt drainage removal by wound examination

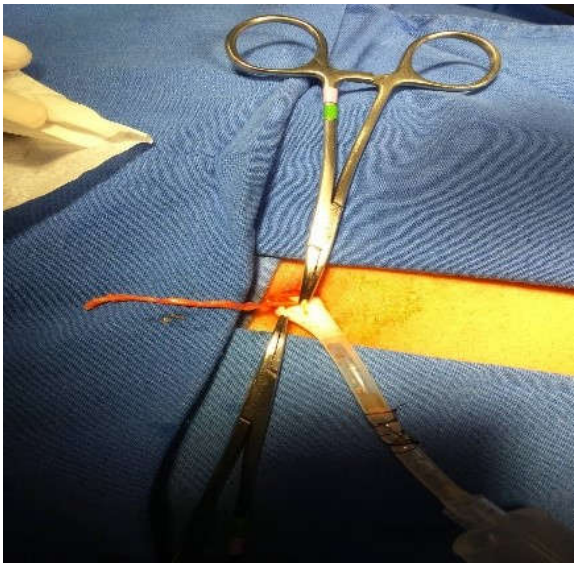

Figure 2. Opening of Jackson Pratt drainage and omentum release.

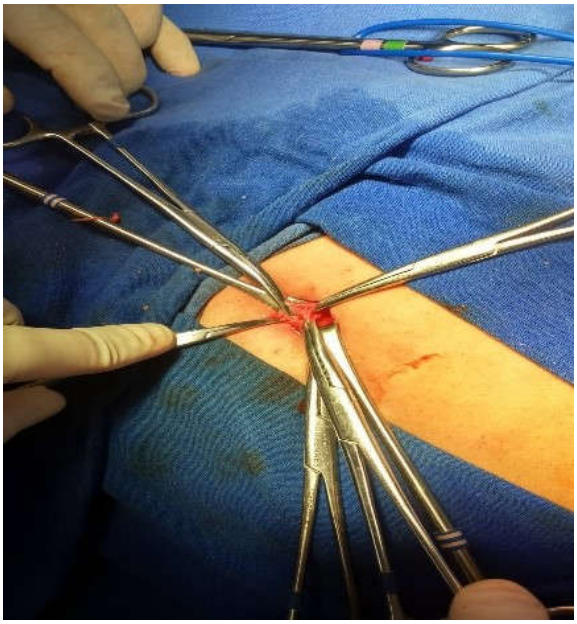

Figure 3. Verification of hemostasis in the wound

Evolution: The patient evolved satisfactorily and high 24 hours later and management by the external consultation

DISCUSSION

As a negative low-pressure suction system, Jackson Pratt drainage is designed so that intra-abdominal contents, such as the omentum or intestines, are not absorbed in the tube, minimizing the risk of bowel perforation or ischemia, which differs in the case of our patient (Durai *et al.,* 2009). Negative low-pressure suction drains are rarely difficult to remove in the postoperative period; however, they may require additional surgery for removal if they have been misplaced or if they have been sutured to the surrounding tissues unintentionally as required. Referred by Parker *et al.* 2008 Fariña-Pesqueira and Liao-Shieh recommend performing minimally invasive approaches such as performing endoscopic, laparoscopic and wound examination, these procedures are performed in the operating room as in the case of our patient (Fariña-Pérez and Pesqueira-Santiago, 2012; Liao and Shieh, 2011), contrary to what Hartanto *et al.,* by endoscopic examination in the patient's bed, with local anesthesia (Hartanto *et al.,* 2001).

Conclusion

Closed drains are an important tool for the management and monitoring of surgeries, however there is a possibility that these drains present adhesions, be fixed accidentally or present intra-abdominal contents, as in the case of our patient, who decided to perform the exploration of the exteriorization site of the Jackson Pratt drainage by enlargement of the wound, by virtue of the presence of omentum in the drainage lumen and under direct vision was successfully extracted, without subsequent complications.

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Conflict of interest: None declared.

Ethical approval: The case was approved for publication by the Institutional Ethics Committee.

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