2nd Annual Conference on SURGERY

September 16, 2024 | Paris France

Surgical management of open abdomen with barker dressing

Jeniffer Colman Pacifico Sao Paulo University, Brazil

Introduction: Laparotomy is a surgical technique in which the abdomen remains open. It treats intra-abdominal sepsis, peritonitis, intra-abdominal hypertension, abdominal compartment syndrome, abdominal aortic artery rupture, and acute ischemia, among others. The patient subjected to this surgery must remain in the intensive care unit (ICU) to monitor and observe possible complications such as electrolyte disorders and dehydration from contact with external air, sepsis, and enter atmospheric fistulae, which this article will focus on. Enter atmospheric fistulae (eaf), as the name suggests, defined as an abdominal opening that connects the gastrointestinal tract to the atmosphere, occurs as a result of an open abdomen caused by abdominal surgery, trauma, perforation, ischemia and anastomosis leakage after surgery.

Treatment: The treatment of enter atmospheric fistulae (eaf) has a clear goal: to limit and control its acute phase. The correct management involves monitoring, supporting treatment, and eaf's closure, which can happen spontaneously or through definitive surgery. Theoretically, a valid alternative to contain the infection would be an urgent laparotomy; however, it is not a viable option due to intestinal edema and dense adhesions, which make this procedure impossible. Therefore, the fistula must be isolated, and a dressing must be applied to allow primary closure. When it is impossible to close the fistula, the medical conduct should aim to allow the acute fistula to become chronic and controlled. With the correct management, there is a slight chance of a fistula's spontaneous closure. However, the recurrence is more likely if compared to those surgically closed. In most cases, spontaneous closure is impossible due to the insufficient amount of vascularized overlying tissue, the efflux of irritating content, and the continuous exposure of the intestine, which leads to protein loss and sepsis. Hence, this closure pattern is more probable to occur in small eafs with low output, thus, making the surgical treatment necessary in most cases.

Conclusion: The enter atmospheric fistula (eaf) is a consequence of an open abdomen. It has three types of classifications, and they directly imply the severity of the consequences that the patient will suffer. Furthermore, treating and controlling its acute phase is essential to keep the patient from progressing to an unfavorable prognosis. A definitive surgical closure will be necessary if spontaneous closure does not occur, and in the meantime, a tac application is necessary. There are multiple methods to apply tac. The most common type, the bvpt, consists of four layers compounded by polyethylene foam, suction drains, a negative pressure device, and an adhesive bandage, because of its material availability and low cost.

Biography

Jeniffer colman pacifico is a student of medical sciences at the faculty of medicine of the City of São paulo University (fm-unicid) in são Paulo, Brazil. Her academic interests include surgical techniques and innovations in patient care, which are reflected in her research on the surgical management of the open abdomen using the barker dressing method. Passionate about advancing her knowledge in the medical field, jeniffer is committed to contributing to improved surgical outcomes and patient safety.