

# A Rare Complication of Abdominal Drain: Fallopian Tube Herniation Through the Drain Site

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Prophylactic drainage of the peritoneal cavity after obstetrical and gynecological surgery is widely practiced. The idea of “when in doubt, drain” is accepted and applied clinically by many surgeons. However, surgically placed drains are not without risk. The present case describes herniation of fallopian tube during the removal of a surgical drain placed after a cesarean section.

**Key Words:** Drain, Fallopian tube, Herniation

Gynecol Obstet Reprod Med 2013;19:47-48

## Introduction

Surgical drains of various types have been used, with the best intentions, in different operations for many years. It is often open to question whether they achieve their intended purpose despite many years of surgery. There is a paucity of evidence for the benefit of many types of surgical drainage and many surgeons still 'follow their usual practice'. With better evidence, management of surgical patients should improve and surgeons should be able to practice based upon sound scientific principles rather than simply 'doing what I always do'.<sup>1</sup> Lack of definitive evidence has not helped the resolution of some controversial issues surrounding the use of surgical drainage.

Drains are used both prophylactically and therapeutically. Although therapeutic drainage is generally accepted to be beneficial, the role of prophylactic drainage is controversial. Use of a prophylactic drain is not routinely recommended after clean surgical procedures. Furthermore we may experience unexpected consequences of using surgical drains as in this case.

We report a case of herniation of fallopian tube while removing surgical drain placed in pelvis after a cesarean section.

## Case Report

A 32 year old G3P1L1A1 woman who previously had a cesarean section has been admitted to the hospital with vaginal bleeding at the gestational age of 32 weeks. Ultrasound ex-

amination revealed an abruptio placenta. The patient immediately underwent cesarean section. Approximately 500 cc blood was observed in abdomen. The operation was successful and terminated with a rubber surgical drain which was placed on douglas space to detect early if any hemorrhages occurred. Three days after the operation, drain was removed. During the removal of the drain, right fallopian tube had been herniated out of the drain incision (Figure 1). To prevent any complication of the tube like strangulation or incarceration the patient had been reoperated immediately under general anesthesia. Drain incision was widened 2 cm and the tube was reducted without any further complication.



Figure 1: Herniated fallopian tube out of the drain incision

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Submitted for Publication: 05. 03. 2013

Accepted for Publication: 15. 04. 2013

## Discussion

Drains are used both prophylactically and therapeutically. The most common use is prophylactic after surgery to prevent the accumulation of fluid (eg, blood, pus) or air. In any surgery in which a dead space (eg, a cavity) is created, the body has a

natural tendency to fill this space with fluid or air. The dictum of Lawson Tait, "when in doubt, drain" is accepted and applied clinically by many surgeons. However the use of a prophylactic drain continues to be a controversial subject.

In obstetrics practice, when there is risk of postoperative hemorrhages after cesarean section, prophylactic drains are used to alert the surgeon. However surgically placed drains are not without risk.

Various complications of abdominal drains have been reported so far.<sup>2</sup> These include pressure necrosis on the adjacent tissues and subsequent complications (bleeding, perforation, fistulization) due to chronic compression, mechanical bowel obstruction and infection. Also, if a drain remains inserted for a long period of time, it may become difficult to remove. On occasion, the drain can be stitched to the wound during closure of deeper layers. Drains are made of strong silicone or polyvinyl chloride plastic and, therefore, are not likely to break, but breakage can occur.<sup>3</sup> Although one purpose of surgical drains is to evacuate excessive fluid accumulation to prevent bacterial proliferation, drains can increase the risk of infection via retrograde bacterial migration.

To best of our knowledge, this is the first report of complication of herniation of fallopian tube during pelvic drain removal.

One important issue about removal of drains is that the person that attempts to remove the drain should report any difficulty encountered during the removal, to the surgeon. The wound may need to be temporarily opened to remove the drain. And also to prevent any visceral herniation as in this

case it may be helpful to remove not directly in one movement with force but instead making some small shaking movements with little force while applying some pressure to the abdomen.

Finally, one must always question the need of prophylactic drainage following surgery as such complications of drains are encountered.

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### **Dren Uygulamasının Nadir Bir Komplikasyonu: Dren Yerinden Fallop Tüp Herniasyonu**

Obstetrik ve jinekolojik ameliyatlardan sonra profilaktik dren konulması yaygın bir uygulamadır. "Şüphelenilirse dren koy" düşüncesi birçok cerrah tarafından kabul gören bir yaklaşımdır. Ancak dren uygulaması komplikasyonsuz değildir. Hiç beklemediğimiz farklı komplikasyonlarla karşılaşabilmekteyiz. Bu yazıda ablasyo plasenta nedeniyle sezaryene alınan ve dren konan, postoperatif drenin çekimi sırasında fallop tüpünün dren yerinden herniye olduğu olguyu sunmaktayız.

**Anahtar Kelimeler:** Dren, Fallop tüpü, Herniasyon

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