



Olgu sunumu/ Case report

**LAPAROSCOPY-ASSISTED MINIMALLY INVASIVE APPENDECTOMY
LAPAROSKOPIK YARDIMLI MİNİMAL İNVAZİV APEKDEKTOMİ**

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Öz

Cerrahi kliniklerde sık rastlanılan durumların başında Akut apandisit gelmekle birlikte klasik tedavisi cerrahidir. Bu klasik tedavi son yıllara damgasını vuran laparoskopik cerrahiden de etkilenmiştir. Laparoskopik apendektominin açık apendektomiye göre en önemli avantajı 'tanısal laparoskopi' yapılarak tanısı arada kalan hastalara doğru yaklaşım sağlanmış olmasıdır. Bunun yanı sıra diğer avantajları olarak da; yara enfeksiyonu ve fitik riskinin daha düşük olması, kozmetik olarak daha iyi yara yeri görünümü elde edilmesi, ameliyat sonrası ağrının daha az olması, günlük hayat aktivitelerine ve işe daha hızlı dönüşün sağlanabilmesi olarak sıralanabilir.

Biz de bu yazımızda iki adet 5 mm'lik port kullanarak laparoskopik yardımcı minimal invaziv apendektomi sunmayı amaçladık.

Anahtar kelimeler: Apendektomi, Laparoskopi, Minimal İnvaziv cerrahi

ABSTRACT

Although acute appendicitis is one of the leading conditions faced in surgery clinics, its classical treatment is surgery. This classical treatment was also influenced by the laparoscopic surgery which left its mark in recent years. The most important advantage of laparoscopic appendectomy compared to open appendectomy is that it provides the correct approach for the patients who could not be diagnosed definitely by performing 'diagnostic laparoscopy'. In addition to this, its other advantages include lower risk of wound infection and hernia, a better cosmetic appearance of the wound, lesser post-operative pain, ability to return faster to daily activities and work.

In the present article, we aimed to present the laparoscopy-assisted minimally invasive appendectomy using two 5 mm ports.

Keywords: Apendektomy, Laparoscopy, Minimal invasive surgery

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INTRODUCTION

Acute appendicitis is one of the most commonly encountered conditions in the surgery clinics. The treatment of acute appendicitis is surgery in classical approach (1). However, serious studies have been published recently about the possibility that antibiotic therapy may be an alternative to appendectomy in patients with uncomplicated acute appendicitis (2). However, the treatment of acute appendicitis was also affected by the minimally invasive surgery which left its mark in the last 10 years. In the literature, many methods such as classical laparoscopic appendectomy, single port, two ports, Natural Orifice Transluminal Endoscopic Surgery (NOTES) have been described so far. (3-6). In the present article, we aimed to present the laparoscopy-assisted minimally invasive appendectomy using two 5 mm ports.

TECHNIQUE

When the patient is in the supine position and under general anesthesia, McBurney point is defined and marked. From here on, an incision measuring 1 cm in size is made and the abdomen is entered with one classic 5-mm trocar using open entrance technique and pneumoperitoneum is created. From this point, intra-abdominal exploration is carried out with a 5-mm camera. If the incident is acute appendicitis and the appendix is mobile, the classic 5-mm trocar which is entered at the beginning is taken out and the abdomen is entered with two 5-mm single port trocars (Medtronic/Covidien SILS™ Port 5 mm) without disrupting the pneumoperitoneum (Figure 1). The camera is introduced from one of these and grasper is inserted from the other one, then the appendix is caught and both trocars are pulled out together (Figure 2 and 3) Afterwards, the operation is terminated after performing the classical appendectomy.

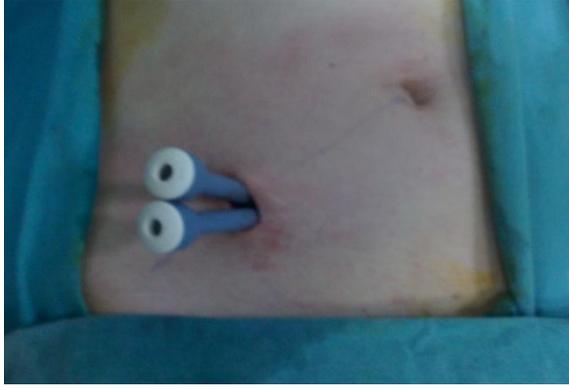


Figure-1 Abdominal entrance locations of single port trocars



Figure-2: Intra-abdominal exploration from camera trocar



Figure-3: Removal of the appendix from the abdomen by joining two trocar incisions

DISCUSSION

Acute appendicitis is one of the most commonly encountered emergency surgery reasons in general surgery. The open appendectomy described by McBurney for the first time and applied for a long time as a gold standard in the treatment is one of the indispensable operations of general surgery. However, with the rapid advancement of medical technology in modern surgery, the surgical treatment of many diseases is also reconfigured. One of the best examples of this is the change in the place of laparoscopic approach in surgery.

Laparoscopic appendectomy was described for the first time by Semm in 1983 and after that date, its efficiency and superiority compared to open appendectomy have been the

subject of many discussions. According to the results obtained from the studies conducted, the place of laparoscopic endoscopy has not been clarified yet (6-8).

Laparoscopic appendectomy has many advantages over open appendectomy. The most important one of these is that it enables simultaneous 'diagnostic laparoscopy'. This advantage comes into the picture in case of patients who cannot be diagnosed definitely and especially for women in fertility age. In addition to this, the other advantages of laparoscopic method include the lower risk of wound infection and hernia, a better cosmetic appearance of the wound, lesser post-operative pain, ability to return faster to daily activities and work (6, 8).

Most of the surgeons use three ports during the laparoscopic appendectomy. The sites of entry and diameters of the ports used vary among the approaches. In addition to the classic 3-port laparoscopic appendectomy, the examples of single-incision-laparoscopic appendectomy (SILS) are also quite abundant in the literature. SILS requires more manual skill and experience than the classic laparoscopic appendectomy. Again, in the literature, classical laparoscopy and SILS were examined and compared many times. Although good cosmetic results are often brought into prominence, this advantage turns into a disadvantage when both methods are switched to the open surgery (1, 5, 8).

Open appendectomy and laparoscopic appendectomy are performed routinely in our clinic and SILS is performed in selected cases. In line with the experiences we obtained from the operations in which we started with the classic laparoscopic method and then had to switch to the open surgery, likewise, the operations in which we started with SILS and then the need of port arose or we had to switch to the open surgery, the idea of performing both laparoscopic abdominal exploration through a mini-incision and carrying out open appendectomy from the same site showed up in selected cases. By this way, both minimally invasive appendectomy and intraabdominal exploration are achieved.

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