

POST APPENDICECTOMY RIGHT ILIAC FOSSA PAIN A PROSPECTIVE STUDY

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ABSTRACT

Background: Diagnosis of acute appendicitis continues to be a real challenge in clinical setting. The recurrence or persistence of pain in the right lower abdomen following appendicectomy is known as post appendicectomy syndrome. This is mainly due to preoperative misdiagnosis (or over diagnosis) and/or postoperative complications. Negative appendicectomy (appendicectomy in the absence of appendiceal disease) rate has been on the rise. In this study, we looked at patients with recurrent or persistent right iliac fossa pain post-appendicectomy and investigated the potential causes for this.

Patients and methods: A prospective study, 47 post-appendicectomy patients presented to Duhok Emergency Hospital, Kurdistan region, Iraq with recurrent or persistent right iliac fossa pain (January 2017 - January 2019). Detailed history taking and clinical examination, as well as appropriate investigations were undertaken as well as review of the previous admission records, investigations, surgical notes and histopathology reports.

Results: Clinical assessment and investigations confirmed the presence of primary cause, other than acute appendicitis or appendectomy-related, for the pain (negative appendicectomy). These included: gastroenterological and inflammatory (lymphadenitis, adhesions, stump appendicitis, familial Mediterranean fever, and perforated duodenal ulcer), gynaecological (ovarian cyst, dysmenorrhea, polycystic ovary syndrome), urological (renal stones, ureteric stone, acute right pyelonephritis) and locomotors (disc prolapsed). In 22 patients, no surgical cause was found and a diagnosis of functional pain was given.

Conclusion: In our study, we have managed to identify the causes of negative appendicectomy. We could not quantify the incidence of such cases but do recognise that these cases raise a question about how to improve diagnostic accuracy. Until now, no diagnostic tool could give a 100% accurate diagnosis but rather a combination of clinical judgement following history and appropriate examination and investigations.

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Keywords: Appendicitis; Appendicectomy; Negative appendicectomy; RIF pain.

Appendicitis is the acute inflammation of the appendix. It is commonly caused by an infection secondary to obstruction of the lumen of the appendix (usually due to a faecolith). By far it is one of the leading causes for abdominal pain in young adults and children, and accounts for a large amount of hospital admissions every year¹. Documented risk factors

include male gender, age (10-20 years), smoking (active, or passive in children) and frequent antibiotic use (e.g. imbalance of gut flora can trigger appendicitis). The diagnosis is mainly based on history and clinical examination, with classic presentation (migrating peri-umbilical pain to the right iliac fossa, with guarding or rebound tenderness, anorexia and nausea)

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present in 50% of the patients with confirmed diagnosis of the condition².

Further investigations are necessary to rule out other causes including gastrointestinal, urological and gynaecological conditions as well as shingles and diabetic ketoacidosis. Routine investigations usually include: haematological and biochemical (i.e. complete blood count [CBC] and C-reactive protein [CRP]), urine analysis (abnormal in 50% of acute appendicitis patients), pregnancy test (when indicated), ultrasound or computed tomography investigation of the abdomen and pelvis or exploration laparoscopy³.

Diagnostics challenges have been identified in up to 50% of acute appendicitis cases due to atypical presentations, which is mainly seen in infants and young children (only vague abdominal pain), elderly (lack of pain and fever) as well as pregnant patients. The anatomical position of the appendix is also a factor that can influence and lead to atypical presentation with retrocaecal/retrocolic appendix presenting with right loin pain, while a subcaecal and pelvic appendix can present with suprapubic pain and urinary frequency. Hence it is not uncommon for patients with abdominal pains, especially in the right iliac fossa, to be diagnosed with acute appendicitis and undergo surgery and then return with recurrent or persistent pain, which may suggest a non-appendiceal cause⁴.

Acute appendicitis is a medical emergency, which requires hospital admission. Appropriate and timely management has been linked to good prognosis. If not managed appropriately, complications may arise including perforation (most common), which begin

after 12 hours of progressive localised inflammation, peritonitis and sepsis. Depending on the clinical assessment and investigations, the surgeon may choose a conservative approach with intravenous antibiotics with watchful waiting with/out elective laparoscopic surgery or proceed to open emergency surgery¹⁻³.

The surgical procedure has been linked to a number of short-term and long-term complications, with complications being higher in the open surgical approach. Open surgical approach is mainly undertaken for emergency rather than routine elective cases. Most common complications include ileus (median prevalence 1.1%), incisional hernia (median prevalence 0.7%), inflammatory bowel disease (median prevalence for ulcerative colitis 0.1%, and Crohn's disease 0.2%) with studies reporting links to colorectal cancer and infertility. Mortality has been reported in both laparoscopic approach (median 0.9%, range 0.3%–3.6%) and open surgical approach (median 1.8%, range 0.6-8.6%)^{1,2,4}.

Persistent right iliac fossa pain post-appendicectomy has been reported and is not that uncommon. Nowadays this is being looked at as a cause that is not related to the surgical procedure but rather a primary one (non-appendiceal disease) and requires further investigations. It is vital to be aware of these causes before rushing into an acute appendicitis diagnosis, which could save the patient unnecessary surgery and its related short and long-term complications⁵.

In this study, we looked at patients with recurrent or persistent right iliac fossa pain post-appendicetomy and investigated the potential causes for this.

PATIENTS AND METHODS

In this prospective study, 47 post-appendicectomy patients presented to Duhok Emergency Hospital, Kurdistan region, Iraq with recurrent or persistent pain (January 2017 - January 2019). Prior to conducting the study, a proposal was submitted to the appropriate university committee and approval was granted. The patients' data were entered onto proformas. The fields included a range of clinical and operative variables related to recurrent/persistent abdominal pains. All patients verbal consented to be included in this study.

The patients were assessed bearing in mind possible causes for such pain which could be directly related to the surgery or the fact it may represent a primary pain (i.e. another diagnosis). Detailed history taking and clinical examination was undertaken as well as review of the previous admission records, investigations, surgical notes and histopathology reports.

A full set of haematological and biochemical investigations were implemented for all patients, including CBC, urea & electrolytes [U&Es – renal function test], liver function test (LFT) and CRP. Urine analysis with further investigations, including pregnancy testing, ultrasonography (US) and/or computed tomography (CT) of the abdomen, intravenous urogram (IVU) and even exploration laparoscopy were undertaken, when indicated.

If the working diagnosis fell outside the expertise of the authors (i.e. general surgery/urology), the patients were referred to other relevant disciplines (i.e. gastroenterology, gynaecology or other acute medical services) for further

assessment and treatment. Patients were then followed-up by the appropriate disciplines and managed until the pain symptoms subsided.

RESULTS

The patients' population comprised 9 (20%) males and 38 (80%) females (M:F ratio 1:4.2). Their mean age at presentation was 22.5 years (range 4-79). Duration at presentation was variable from immediate postoperative period up to one year post appendicectomy. More than half of the patients presented after six months from time of surgery. None of the female patients included in this study were pregnant.

Clinical assessment and investigations confirmed the presence of another primary cause, other than acute appendicitis or appendicectomy-related, for the pain (Figure 1). These included:

Gastroenterological and inflammatory: (21%)

- Lymphadenitis: 4 patients
- Adhesions: 3 patients
- Stump appendicitis: 1 patient
- Familial Mediterranean fever (FMF – auto-inflammatory): 1 patient
- Perforated duodenal ulcer: 1 patient

Gynaecological: (17%)

- Ovarian cyst: 3 patients
- Dysmenorrhea: 4 patients
- Polycystic ovary syndrome (PCOS): 1 patient

Urological: (12.8%)

- Renal stones: 3 patients
- Ureteric stone: 2 patients
- Acute right pyelonephritis: 1 patient

Locomotor: (2.1%)

- Disc prolapse: 1 patient

Functional - no clear surgical cause was found in the rest 22 (47%) patients, with likely causes including:

Psychological
Irritable bowel syndrome
Muscular

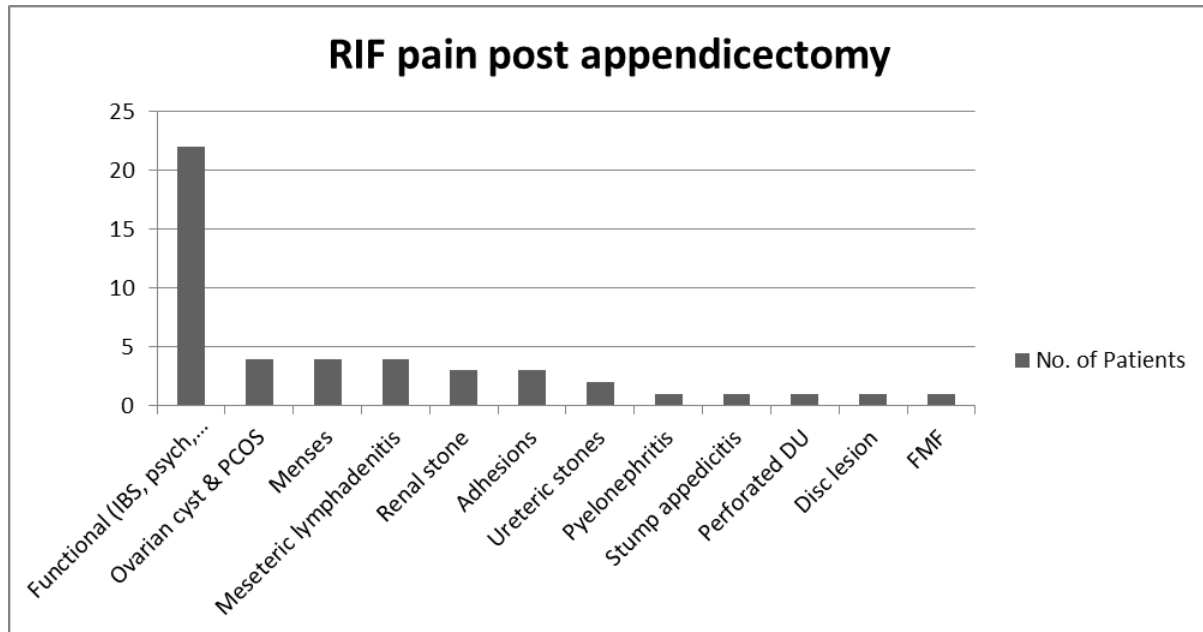


Figure 1: The distribution of 47 patients with post appendectomy syndrome

Four patients were subjected to laparoscopic evaluation for their pain (adhesions were found in 3 and bleeding ovarian cyst was found in one patient).

In our study the male patients were more prone to organic pathology, such as stump appendicitis, perforated duodenal ulcer and FMF, while the female patients were more prone to functional pain of menses and irritable bowel syndrome). No clear surgical cause was found in the 22 (47%) of the patients, with likely diagnoses of irritable bowel syndrome, muscular or psychological causes were attributed.

All patients who needed second surgical intervention were managed electively; and none of them required emergency surgery.

DISCUSSION

Management of suspected acute appendicitis continues to be via open

surgical approach. Diagnosis of acute appendicitis continues to be a real challenge in clinical setting, with about half of the patients with true appendicitis presenting with atypical fashion while at least a third is over diagnosed and end up having unnecessary surgical intervention with the added risks of short-term and long-term complications¹⁻⁴.

The recurrence or persistence of pain in the right lower abdomen following appendectomy is known as post appendectomy syndrome (PAS). The condition arises from two possibilities: preoperative misdiagnosis (or over diagnosis) and/or postoperative complications. Table 1 illustrates possible differential diagnosis for conditions that may mimic acute appendicitis. The gold standard approach remains history taking and clinical examination, aided with diagnostic tests based on clinical judgement. In a study, Hardin

recommended rectal examination, during an assessment for a suspected appendicitis, as it can provide useful information, only when the diagnosis is unclear. Hardin recommended blood test (CBC) and urinalysis as part of the investigation process, and to use US or CT in

challenging cases. Ultimately, the article reached a conclusion that delay in diagnosing appendicitis increases the risk of perforation and complications, hence a balance should be achieved between “time to investigate” vs. “time to act”⁶.

Table 1: Conditions that are misdiagnosed as acute appendicitis

Discipline	Related conditions
Congenital conditions	Missed Meckel's diverticula
Inflammatory conditions and other bowel-related conditions	Congenital renal malformations Gastroenteritis Intussusception Non-specific mesenteric lymphadenitis Crohn's ileitis Acute cholecystitis Diverticulitis (Meckel's and colonic) Terminal ileitis Ileocecal tuberculosis Worm (enterobiasis) Amoebic typhlitis Familial Mediterranean fever (autoinflammatory) Stump appendicitis Irritable bowel syndrome
Urological	Chronic UTIs Right ureteric stone Tubercular cystitis Right pyelonephritis Non-specific haematuria
Gynaecological	Ectopic pregnancy Right salpingoophoritis Small right ovarian cyst Ovarian torsion Ruptured ovarian follicle Pelvic inflammatory disease Dysmenorrhea PCOS
Neurological	Prolapsed intervertebral disc producing radiating spinal pain
Psychosomatic	Appendix phobia Hysterical pain
Others	Rectus sheath haematoma Porphyria Diabetic ketoacidosis Shingles

In a study by Das et al., 912 appendicectomies were performed on

clinical suspicion of acute appendicitis during the period of 6 years. The negative

appendicectomy (appendicectomy in the absence of appendiceal disease) rate in this study was 36.40%. Furthermore, females had a higher number of negative appendicectomy at 40.34%. The study came to conclude that surgeons tend to over diagnose fearing to miss an acute appendicitis, which is linked with high morbidity and mortality. Furthermore, the researchers recommended a thorough work-up with preoperative imaging and diagnostic laparoscopy, where applicable, to enhance diagnosis and prevent over diagnosis¹.

When it comes to gender, out of 47 patients included in this study, 38 patients were females. Similarly most of the studies concluded that female patients are more (75-100%) prone to right iliac fossa pain due to gynecological disorders such as pelvic inflammatory disease and endometriosis and high percent of negative appendicectomy with high morbidity^{5,7,8,9,10,11}.

To reduce the rate of negative appendicectomy, more publications are now recommending the use of non-contrast CT to investigate suspected appendicitis. Malone and Shetty reported that unenhanced CT scanning has a high level of accuracy in diagnosing acute appendicitis. Furthermore, many unsuspected diseases have been discovered during the course of the unenhanced CT examination³. Many studies that followed confirmed that CT was accurate and reliable as a diagnostic tool for acute appendicitis, but a number of controversies arose which was mainly related to risk of radiation and that many surgeons feared that the attempt to reduce over diagnosing appendicitis (negative appendicectomy

rate) may eventually lead to increase in frequency of perforated cases⁴.

In a study by Walker et al., patients were randomised to receive mandatory CT scanning or not for suspected appendicitis. The negative appendicitis rate was reduced by mandatory CT scan and the clinical management was changed in 26% of the patients, meaning that a quarter of the patients in the study that presented with suspected appendicitis were found to not have appendiceal disease and did not undergo surgery¹². While another study did not find mandatory CT to be superior to clinical examination in reducing the rate of negative appendicitis¹³. On the whole, authorities around the world seem to agree that CT scanning is the tool of choice that can help to provide a relatively precise diagnosis in challenging cases.

The use of ultrasonography in diagnosing acute appendicitis has some advantages (mainly no radiation) but on the whole was found to be inferior in diagnostic accuracy when compared to CT¹⁴. When compared to magnetic resonance imaging (MRI), Cobben et al., and in a group of 36 patients, reported that MRI was able to diagnose acute appendicitis in 8 patients and identified 4 patients with alternative diagnoses, while US reported no abnormalities in any of those 12 patients. The authors of the study recommended MRI as a tool that can reduce negative appendicectomy rate, and save those patients unnecessary operations¹⁵.

The introduction of scoring system was a new way to try and reduce the rate of over diagnosis/ negative appendicectomy. Several scores have been introduced with the most well recognised one being the Alvarado score¹⁶. The score was

introduced as a practical score for early diagnosis of acute appendicitis and was mainly based on 3 signs (RLQ tenderness, rebound pain and increased temperature of ≥ 37.3 °C), 3 symptoms (migration of abdominal pain to the RLQ, anorexia and nausea/vomiting) and 2 laboratory findings (leukocytosis and neutrophilia). A recent study applied the score on 766 adult and paediatric patients and found it to be 75% accurate, with 83% sensitivity and 86.7% positive predictive value¹⁷.

Laparoscopy is a safe and effective diagnostic and therapeutic tool in patients with uncertain cause for chronic abdominal pain. Ondersand Mittendorf, El-labban et al. and Szomstein et al. found that adhesions are the main laparoscopic findings in more than 60% of their patients with past abdominal surgery including appendectomy, and 80-90% of them will have their pain relieved after laparoscopic adhesiolysis^{9,18,19}. On a separate note, diagnostic laparoscopy has been looked at as beneficial tool in acute appendicitis. In a meta-analysis, which included 14 studies, the reduction in negative appendectomy rate has been impressive (RR 0.37; CI 0.13 to 1.01), especially among reproductive-age women (RR 0.20; CI 0.11 to 0.34)²⁰.

Studies from the reviewed literature on clinical skills and laboratory investigations for suspected appendicitis seems to agree that patients should received per rectal examination when diagnosis could not be confirmed, and that blood testing for inflammatory markers should be offered routinely to every patient. Furthermore, the diagnostic aids for acute appendicitis suggests that computed tomography, magnetic resonance imaging and/or

diagnostic or exploration laparoscopy should always be offered when dealing with challenging cases, if not part of the routine investigations.

Our study included patients with uncommon negative appendectomy diagnosis including stump appendicitis and familial Mediterranean fever. Stump appendicitis is an inflammation of remnant appendix tissue due to incomplete surgical removal of the appendix, (if more than 5 mm stump left) usually due to technical or local anatomical factors. Its clinical presentation is similar to the classical appendicitis and its diagnosis is usually delayed because of past history of appendectomy and that is why mostly present with complications²¹. In our patient with stump appendicitis, the patient operated for local abscess three days after presentation.

While, familial Mediterranean fever is a rare auto inflammatory disease, Karaaslan et al. And Majeed *et al* found that abdominal pain or peritonitis was present in 85-92% of their patients with FMF and one third of them were subjected to unnecessary abdominal surgery, reflecting the diagnostic difficulties. More than 40% of patients with FMF had history of surgery and its diagnosis is often missed and markedly delayed for more than 20 years as more than 50% of them have negative family history of FMF^{22,23}. Kisacik et al. established the diagnosis of FMF in 7.7 % of his patients with negative appendectomy²⁴.

CONCLUSION

In our study, we have managed to identify cases that were over diagnosed or

misdiagnosed as acute appendicitis where the patients ended-up undergoing unnecessary open appendectomy in the absence of appendiceal disease. We could not quantify the incidence of such cases but do recognise that this number raises a question about how to improve diagnostic accuracy. Until now, no diagnostic tool could give a 100% accurate diagnosis but rather a combination of clinical judgement following history and appropriate examination and investigations.

CONFLICT OF INTEREST

We declare none

REFERENCES

1. Das MK, Gautam D, Roy H, Mukherjee A, Gaurav R, Sen S. Unnecessary appendectomy in suspected cases of acute appendicitis. *J Indian Med Assoc.* 2009 Jun;107(6):354, 356-7.
2. Flum DR, Morris A, Koepsell T, Dellinger EP. Has misdiagnosis of appendicitis decreased over time? A population-based analysis. *JAMA.* 2001; 286(14):1748–53.
3. Malone AJ, Shetty MR. Diagnosis of appendicitis. *Lancet.* 1997 Jun 14;349(9067):1774.
4. AanningHL. Negative appendectomy and perforation rates in the SCOAP trial. *Ann Surg.* 2009; 249(4):699.
5. Chakraborty T, Pan S. The menace of persisting right iliac fossa pain after appendectomy – are we over doing it? *JEMDS.* 2017 Mar; 21 (6):1731-35.
6. Hardin DM Jr. Acute appendicitis: review and update. *AmFam Physician.* 1999 Nov 1;60(7):2027-34.
7. Lamture Y, Gajbhiye V, Shinde R, Kher K. Impact of post appendectomy pain. *International Surg J.* 2017 Sep;4(9):2932-2936
8. Vaishnav U, Patel HS. Analysis of diagnostic laparoscopy in chronic right iliac fossa pain. *IntSurg J.* 2017; 4(4):1259-62.
9. Onders RP, Mittendorf EA. Utility of laparoscopy in chronic abdominal pain. *Surgery.* 2003;134:552-4.
10. Mock K, Lu Y, Friedlander S, Kim DY, Lee SL. Misdiagnosing adult appendicitis: clinical, cost, and socioeconomic implications of negative appendectomy. *Amer J Surg.* 2016; 212(6):1076-82.
11. Killen MC, Habeeb AH. Right iliac fossa pain in females under thirty: the role of ultrasound scanning. *IJS* 2012; 10(8) 29.
12. Walker S, Haun W, Clark J, McMillin K, Zeren F, Gilliland T. S, Haun W, Clark J, et al. The value of limited computed tomography with rectal contrast in the diagnosis of acute appendicitis. *Am J Surg.* 2000; 180(6):450–4.
13. Hong JJ , Cohn SM, Ekeh AP, Newman M, Salama M, Leblang SD.. A prospective randomized study of clinical assessment versus computed tomography. *Surg Infect (Larchmt).* 2003; 4(3):231–9.
14. Poortman, Oostvogel HJ M, Bosma E, Lohle PNM, Cuesta MA, de Lange-de Klerk ESM, Hamming JF.. Improving diagnosis of acute appendicitis: results of a diagnostic pathway 1with

- standard use of ultrasonography followed by selective use of CT. *J Am Coll Surg.* 2009; 208(3):434–41.
15. Cobben L, Groot I, Kingma L, Coerkamp E, Puylaert, Blickman JJ.. A simple MRI protocol in patients with clinically suspected appendicitis: results in 138 patients and effect on outcome of appendectomy. *EurRadiol.* 2009; 19(5):1175–83.
 16. Alvarado A. A practical score for the early diagnosis of acute appendicitis. *Ann Emerg Med.* 1986; 15(5):557–64.
 17. Lee SL, Walsh AJ, Ho HS. Computed tomography and ultrasonography do not improve and may delay the diagnosis and treatment of acute appendicitis. *Arch Surg.* 2001; 136(5):556–62.
 18. El-labban GM, Hokkam EN. The efficacy of laparoscopy in the diagnosis and management of chronic abdominal pain. *J Minim Access Surg.* 2010 Oct-Dec; 6(4): 95–99.
 19. Szomstein S, Lo Menzo E, Simpfendorfer C, Zundel N, Rosenthal RJ. Laparoscopic lysis of adhesions. *World J Surg.* 2006 Apr;30(4):535-40.
 20. Sauerland S, Jaschinski T, Neugebauer EA. Laparoscopic versus open surgery for suspected appendicitis. *Cochrane Database Syst Rev.* 2010; (10):CD001546.
 21. Durgun AV, Baca B, Ersoy Y, Kapan M. Stump appendicitis and generalized peritonitis due to incomplete Appendectomy. *Tech Coloproctol.* 2003;(7):102–104
 22. Karaaslan Y, Dogan I, Omma A, Sandikci SC. How long is the diagnosis of Familial Mediterranean Fever (FMF) delayed in a region where FMF is common in Turkey? *PedRhe.* 2015; 13(Suppl 1):P82.
 23. Majeed HA, Barakat M. Familial mediterranean fever (recurrent hereditary polyserositis) in children: analysis of 88 cases. *Euro J Ped.* 1989; 148(7): 636–41.
 24. Kisacik B, Karabicak I, Erol MF, Ozer S, Pehlivan Y, Onat AM, et, al. Is familial Mediterranean fever (FMF) common in patients with negative appendectomy? *Mod Rhe.* 2013; 23 (2):330–33.

پوخته

نازارین لایڼ راستیڼ بنی زکیشتی نیشترگرهیا لابرنه ریفیا کوره قهکولینهکا چافهریکریه

پیشگی:

دهست نیشانکرنا ههوکردنن ریفیا کوره نیکه ژ بهرنهکارین راستهقینه د ریکخستنا پراکتیکیا روژانهدا. دووبارهبوون و بهردهوام بوونا نازارین لایڼ راستیڼ بنی زکیشتی نیشترگرهیا لابرنه ریفیاکوره دهیته نیاسین وهک کونیشانی پشت نیشترگرهیا ریفیا کوره. نهفهژیکفهدگریت بو دهستیشانکرنا خهلهتیا بهری نیشترگرهییان زیددهستیشانکرنا ژ بهر سهربرکین پاش نیشترگرهیی. نیشترگرهیا نه رینییا ریفیا کوره (واته نیشترگرهیا ریفیا کوره دگهل نه دیاربوونا نیشین ریفیکا کوره) ریژه دزیدهبوونی دایه. دقیهکولینی دا مه چاف خسته سهرنه خوشین دووبارهیان بهردهوام دنالن ژ زکیشانین بنی زکی ژ نالی راستی پشتی نیشترگرهیا لادانا ریفیا کوره و پشکنین کرن بو ناشکراکرنا هوینقهشارتی.

شیواز و نهخوش:

قهکولینهکا چافهریکری دا ۴۷ نهخوش پشتی نیشترگرهیا لادانا ریفیا کوره هاتنه دیتن ل نهخوشخانا دهوک یا تهنگافیا ل هریما کوردستنا عیراقی. ژ بهر دووبارهبوون و بهردهوام بوونا نازارین بنی زکی لایڼ راستی (ههر ژ مه ها نیک ۲۰۱۷ ههتا مه ها نیک ۲۰۱۹) چیروکا نهخوشییا توخمه و پشکنینا نهخوشی بو ههمیان هاته کرن و دگهل دا پیداچوونهک بو داتایین نقاندنا بهری نووکه و پشکنین و تیبینین نیشترگرهیی و پشکنین پاتولوجیین بهرنوکه هاتهکرن

دبرنه نجام:

خهملاندنا نهخوشی و پشکنینان دیار کر کو هوینی راستهقینه ژ بلی ههودانا ریفیا کورهیان پهیوهندی دگهل نیشترگرهیا ریفیا کوره ژ بو نیشانی (نیشترگرهیا نه رینی) نهقه نه: هوین جووبارین میژ (ههودانین جووبارین میژ و بهرین دناف گولجیسکیان بوریایوریتهدا و خووینبوونین میژ نه دیارکری) هوین گریدایی ژنان (کیسین هیلکه دانی و نازارین خووینرسینا ههیفانه و کونیشانی کیسبوونا هیلکه دانی) هوین ههرس و ریفیکان و ههودانین دی (کونیشانی قولونا نارحمت و ههودانا گهدهو ریفیکا و کولبوونا گریین لمفاوی و ههودانا بنی ریفیا کوره و تیا بنه مالمیا ده ریا سپیا نافه ند)

دبرکه فتن:

دقهکولینهکا ده نهم شیاپین هوکارین نیشترگرهیا نه رینییا ریفیا کوره دیارکهن. نهم نهکارین پیفانا ریژا روویداناقان کهیسا بکهین بهلی دشین بیژین کو ههبووناقان بوویهرا پرسیارهکی بلند دکهت کو دی چاوا دهستیشانکرنا درست زیدهکهن. ههتا نووکه چ نامیرین دهست نیشانکرنا نهشین ریژا ۱۰۰٪ دهست نیشانکرنا درست بدهن بهلی لیکدانهکه ژ بریارا پراکتیک دگهل دوویفچوونا چیروکا نهخوشی و پشکنینهکا توخمه و پشکنینان

الخلاصة

الام الحفرة الحرقفية اليمنى مابعد استئصال الزائدة الدودية دراسة مستقبلية

خلفية البحث

تشخيص التهاب الزائدة الدودية الحاد لا يزال يشكل تحدياً حقيقياً في الإعدادات السريرية. يُعرف تكرار الألم أو استمراره في أسفل البطن الأيمن بعد استئصال الزائدة الدودية باسم متلازمة ما بعد استئصال الزائدة الدودية. هذا يرجع أساساً إلى التشخيص الخاطئ قبل الجراحة (أو التشخيص الزائد) و/ أو مضاعفات ما بعد الجراحة. معدل استئصال الزائدة الدودية السلبي (استئصال الزائدة الدودية في غياب مرض الزائدة الدودية) كان في ارتفاع. في هذه الدراسة، نظرنا إلى المرضى الذين يعانون من آلام الحفرة الحرقفية اليمنى المستمرة أو المستمرة بعد استئصال الزائدة الدودية، وبحثنا في الأسباب المحتملة لذلك.

المرضى وطرق البحث

دراسة مستقبلية ، تم دراسة 47 مريضاً يعانون من متلازمة ما بعد استئصال الزائدة الدودية إلى مستشفى الطوارئ في دهوك ، إقليم كردستان ، العراق يعانون من آلام الحفرة الحرقفية اليمنى المستمرة أو المتكررة (كانون الثاني 2017 – كانون الثاني 2019). تم أخذ تاريخ طبي مفصل وأجراء الفحص السريري بالإضافة إلى مراجعة سجلات الدخول والفحوص الطبية السابقة والملاحظات الجراحية وتقارير الفحص المرض النسيجي.

النتائج

أكد التقييم السريري والتحقيقات وجود سبب أولي، بخلاف التهاب الزائدة الدودية الحاد للألم (استئصال الزائدة الدودية السلبية). وتشمل هذه الأسباب: أمراض الجهاز الهضمي والتهابات (التهاب الغدد اللعابية والألتصاقات والتهاب بقايا الزائدة الدودية وحمى البحر الأبيض المتوسط العائلية وقرحة الإثني عشر المخترقة)، أسباب أمراض النساء (كيس المبيض، عسر الطمث ، متلازمة المبيض المتعدد الكيسات) المسالك البولية (حصى الكلى أو الحالب، التهاب حوض الكلية الأيمن الحاد) الجهاز الحركي (انزلاق الفقرات الغضروفي). في 22 مريض، لم يوجد أي سبب جراحي وقد شخصت كآلم وظيفي.

الاستنتاجات

في دراستنا، تمكنا من تحديد أسباب استئصال الزائدة الدودية السلبية. لم نتمكن من تحديد مدى حدوث مثل هذه الحالات ولكننا ندرك أن هذه الحالات تثير سؤالاً حول كيفية تحسين دقة التشخيص. حتى الآن، لا يمكن لأي أداة تشخيصية أن تقدم تشخيصاً دقيقاً بنسبة 100% ، بل مزيجاً من الحكم السريري الذي يتبع التاريخ والفحص والتحقيقات المناسبة.