"Post-appendectomy" Acute Appendicitis in a rural area: A surgical dilemma.

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Acute appendicitis is the commonest abdominal surgical emergency worldwide. Its diagnosis is a clinical one and its treatment is removal of the inflamed appendix. In this paper, three cases of acute "post-appendectomy" appendicitis are presented. The paper discusses the problems of communication between doctors and patients in rural Africa.

Introduction

Acute appendicitis is the most common abdominal emergency wordwide¹. In Africa, the condition has been recognized as a common problem for many years². Its diagnosis is basically a clinical one, requiring no sophisticated investigations. Its treatment is surgical, and in the hands of a competent surgeon it is an easy procedure. Because it is easy to diagnose and to remove, many surgeons do incidental appendectomy during other procedures^{3,4}.

Unfortunately, because of the low education levels in Africa, the majority of our people find it difficult to understand the medical terminology. For instance, it is a difficult undertaking to make an old grandmother appreciate the difference between an appendectomy and hysterectomy. Thus we can see that a problem of communication soon arises between the patient and the doctor,

leading to misunderstanding. Added to this is the routine nature of the surgical treatment of appendicitis, which leads to exaggerations, to the extent that we see in our daily practice patients with a clinical picture of acute appendicitis after appendectomy.

It was with such a background that the author wanted to share his experience of three cases of acute appendicitis following "appendectomy" seen at the Evangelical Medical Centre (CME) of Nyankunde in the Democratic Republic of Congo with a hope that other surgeons will not fall in similar traps.

Case reports Case 1.

S.U., a 22 year old student at a higher education institution in the region, presented at CME with a two days history of severe pain in the right iliac fossa. He reported that he had had "appendectomy" two years previously. On examination, he was found to have a typical McBurney scar and there was the classical cutaneous hyperaesthesia in the RIF typical of acute appendicitis. Considered in the differential diagnosis were post appendectomy adhesions, typhoid fever associated with mesenteric adenitis or urinary tract infection with lithiasis. The patient was treated with anti-inflammatory drugs. On the

4th day of hospitalization, the patient developed a fever with obvious signs of localized right iliac region peritonitis. Surgical exploration was done through the old Mcburney's scar. On opening the abdomen, there was pus. An inflamed partially amputated appendix was found. Appendectomy was completed and a drain was left in the RIF.

Postoperatively, the patient did well on antibiotics and had a generally uneventful recovery period. He was discharged on the 10th post-operative day.

Case 2.

N.G., a 15 year old female student at a Girls' Technical School, was admitted with a history of pain in the right iliac fossa associated with vomiting. Her parents reported that she had a similar episode of symptoms six months previously for which appendectomy was performed. On examination, she was found to have a temperature of 37.8 degrees centigrade. She had a McBurney scar and all the classical signs of acute appendicitis. Laparotomy was then done through a midline sub-umbilical incision. An inflamed retrocaecal appendix was found. A retrograde appendectomy was done; the stump was then buried.

When contacted later, the surgeon who performed the previous operation admitted that due to lack of experience, he had failed to locate the appendix and therefore had concluded that the patient must have been born without one. However, he never communicated his findings to the parents who were sure that the appendix had been removed.

Case 3.

B.V. was a 23 year old nurse who presented with a history of lower abdominal pain. She reported that she had had an appendectomy done when she was a student nurse. On examination, she had a strange small scar in the right iliac region and had signs of peritoneal irritation predominantly on the right side. An initial diagnosis of right salpingo-oophritis was made and the appropriate treatment started.

When the patient failed to improve and her condition was getting worse, a laparotomy, through a sub-umbilical incision was performed. An inflamed oedematous appendix was found. A classical appendectomy with burial of the appendix stump was done. The patient had a good post-operative recovery period.

On further enquiry into her past surgical history, it was discovered that the so-called previous "appendectomy" was only a scenario put on to avoid a family crisis after an unwanted pregnancy. The scar was of a small symbolical incision made in the RIF to justify the hospitalization and the general anaesthetic given during the performance of a criminal abortion so as to put the family and other doctors off track.

Discussion

It is not unusual to see a patient coming back with symptoms of acute appendicitis after an apparent appendectomy. We consider this to be a deceptive trap which starts with the surgeon who gets convinced that an appendectomy had been performed firstly because of what the patient or his family say and secondly because of the presence of a McBurney's surgical scar. Altemeier and Culbertson⁵ noted that a diagnosis of "postappendectomy" acute appendicitis is possible in situations such as after drainage of an appendicular abscess without appendectomy, when subtotal or partial amputation of the appendix is done when the organ is not totally removed or when the surgeon is unable to bury the stump.

Several lessons are learnt from the second case. Congenital absence of an appendix is such an extremely rare occurrence that it should only be considered a possibility after a thorough

inspection of all the recognized positions of the appendix⁷ and this demands of the surgeon to be meticulous and patient. The appendix in the retrocaecal position can sometimes create serious difficulties during its removal if the surgeon is inexperienced. In such situations it is not pejorative or demeaning to ask for the help of a senior colleague.

The third case clearly demonstrated the need to enforce the legislation against criminal abortion and to try to discourage charlatans. We wanted to describe our experience because of the plethora of surgical centres, which lack experienced hands, and the high frequency of provoked abortions managed under all sorts of pretence.

In the developing nations, it is important to consider the low educational status of our patients who sometimes cannot remember what they were told about the indication for surgery, the operative findings and the type of procedure performed. Moreover, record keeping in many of the hospitals is poor and the operating protocols difficult to find where they exist. In order to overcome all these obstacles in our hospital, a policy was put in place that demands of the surgeon to show to the patient and the family any organ or tissue removed at surgery. We believe that visual memory would be more difficult to forget than the verbal one.

For the appendicular abscess, our policy is not to drain the abscess as is classically done, but to perform appendectomy by taking the most direct route that is best indicated under the circumstances, carefully separating the adhesions and then removing the appendix.

In addition to what has gone on before, we also wish to raise the problems of communication between the patients and the clinicians in our African environment. This factor has already been highlighted in the developed world as one that

affects the quality of care. We must therefore realize that it is a thorny problem in countries where poverty and illiteracy dominate daily life. In such situations, medical jargon belongs to a handful of people. We must make an effort to reduce the general impression that doctors have their own private technical language. Terms such as peritonitis, appendicitis and others sound like a foreign language in the ears of the patients. It should not be surprising therefore if the term "drainage" is understood by the patient to mean removal of the appendix.

In summary, "post-appendectomy" acute appendicitis can be found in the following situations:

- 1. In cases of appendicular abscesses in which simple drainage is done without removing the appendix but leaving a McBurney or Jalaguier surgical incision scar.
- 2. When medical jargon was used for communication with illiterate patients or families who by the time they report again to hospital they can never remember the type of surgery done.
- 3. Lack of experience on the part of the first surgeon, who when faced with certain difficulties, fails to find the appendix and comes to premature conclusion that the appendix is congenitally absent or in cases of bad surgical technique. There is no indication for partial appendectomy. Appendectomy must always be total, at the base of the organ.
- 4. Dishonesty of the patients and charlatans who make people believe that they have had or performed good surgery(Appendectomy) in order to hide their criminal act (abortion).

Therefore the presence of a McBurney or Jalaguier surgical incision scar for a wary surgeon can mean something else other than appendectomy. Doctors in the rural hospitals should therefore be more prudent as they wait for arrival of sophisticated diagnostic techniques such as ultrasound.

In conclusion, since appendectomy is a common operation, we must reinforce extreme care of this surgical procedure which because of its frequency has probably become too much of a routine operation. Such an attitude will spare us from falling into traps, which in one way or another may result in loss of life.

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