

An Analysis of A Series of Patients of Stump Appendicitis in a Tertiary Care Centre

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ABSTRACT:

Introduction: Appendicitis is a very common surgical procedure done all over the world. It is a disturbing factor for the patient and the surgeon that the patient comes back to the surgeon with features of appendicitis after appendicectomy. We have tried to see the clinical profile of such patients and outcome after the second surgery. **Material and Methods:** It is a retrospective study. We included only the patients after appendicectomy who had come back with recurrent symptoms and were diagnosed as stump appendicitis. No age criterion was there. We traced the record for 9 years from sept 2013 to sept 2022. All the clinical features and all labs, radiological features, were analysed. **Results:** We found that out we had 5 patients of stump appendicitis. All of them were adults. There was none from pediatric age group. There were 3 males 3 and only 2 were females. The stump was invariably more than 1.5cm long in all of them. CRP was raised in all of them. Perforated ones were less in number than nonperforated. More patients had been done by open method for the primary appendicectomy. **Conclusion:** This rare entity has to be kept in mind in evaluating Right Iliac Fossa pain(even after appendicectomy) and a long stump should not be left during appendicectomy.

Keywords: Stump appendicitis, completion appendicectomy, length of stump

INTRODUCTION:

Acute appendicitis is very common. Appendicectomy is a very common procedure all over the world. Stump appendicitis is a condition of inflammation of residual appendix after the appendix has been partially removed. Though the stump appendicitis is a rare diagnosis but attention towards this important condition is important. This has important implications in the management of patient of Pain in right iliac fossa.

RESULTS:

The results were found as follows:

Total Number of Cases labelled as stump appendicitis=5

Male were=3, females were=2

Perforated =1, nonperforated=4

CRP was raised in all patients

4 were previously (primary appendicectomy) done by open method, one had been done by lap method.

Completion appendicectomy was done by open method in all patients. Stump was more than 1.5 cm all patients. All the cases were diagnosed by CT abdomen. The average time between primary and second attack was found 9 years

DISCUSSION:

Acute appendicitis is very common and as such appendicectomy is common too. The people working in Emergency Room should be made aware that there is an entity called stump appendicitis whose symptoms and signs are same as acute appendicitis. It was Rose in 1945 who gave the idea of stump appendicitis (1). In our hospital we have operated approximately 9000 cases in these 09 years which could mean that we have found one case of stump appendicitis per 1800 patients operated for appendicectomy. But this is an incorrect estimate for many reasons. One is that we perused the record for only 9 years. Second reason being that many

cases stump appendicitis may have been operated for primary appendectomy outside our hospital. Also many cases operated for primary appendectomy in our hospital may have go to other hospital for operation for stump appendectomy. The primary cause of the stump remaining there is probably the incorrect identification of caecoappendiceal junction. In our case series all the stumps were more than 1.5 cm long. The actual recommendation is that the stump should be only 3 mm long. The correct method for appendectomy involves proper visualization of appendix base or caeoappendiceal junction (2). The primary reason for leaving a long appendix in our series probably seems to be that this operation is usually done by budding surgeons in this hospital who are not very experienced in the surgical field.

One other rare possibility of a condition resembling acute appendicitis after appendicectomy is double appendix (3)(4). This entity is discussed here for academic purposes only. We have not seen any such case in our series.

In our series CT was used in all the five patients and all of them were diagnosed by CT only. That is the similar finding as was observed by Rao et al (5). The CT Abdomen is also helpful in guiding the surgeon during surgery on the patient of stump appendicitis.

Though in the literature one case of malignancy of the stump also has been reported but in our series we did not find any case who had a malignancy on histopathology. This case has given additional dimension to this topic (6).

In the paper published by Kurt E Roberts et al, they suggested that completion appendectomy in cases of stump appendicitis should be done by laparoscopic method guided by CT findings (7). In our series we found that all cases of completion appendectomy have been done by open method. The main reason for that laparoscopy was not freely available in all hospitals in the past. While so far we could not any mention of perforated stump appendicitis in literature we have found that in our study one case was perforated also. In our setting the main reason for perforation was delay in coming to a diagnosis. The main factor responsible for delay is the false belief that appendicitis can not occur in a patient of past history of appendectomy. If we see the interval between the primary surgery and stump appendectomy, we have found average time was 9 years. But this aspect needs further research. This dimension needs more series to come to a conclusion about this aspect of stump appendicitis. If we really blame a long appendicular stump for the stump appendicitis then a question can be asked. what is the

maximum length which should be left as the stump?. It is a big question. Ideally a study needs to be undertaken to study as to how many patients after appendectomy had a long appendix and what percentage of them later developed stump appendicitis. For that purpose a follow up investigation needs to be taken up to see the size of stump of appendix in asymptomatic patients and then follow them for development of stump appendicitis later on. This seems to be practically hard. We believe that a long stump (more than 3 mm) is more commonly present than presumed in patients who are status- post appendectomy, as this operation is usually done by young inexperienced surgeons in emergency settings. Anyway further research is needed in this matter .

CONCLUSION:

The physicians in Emergency Room should always be made aware of this condition known as stump appendicitis. CT scan should preferably be used in the diagnosis of stump appendicitis. Laparoscopic operation should be preferably undertaken for completion appendectomy unless there are strong reasons for doing open surgery.

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