

Management of Acute Appendicitis with Preference on Delayed Primary Suturing of Surgical Incision

Authors : N. A. D. P. Niwunhella, W. G. R. C. K. Sirisena

Abstract : Appendicitis is one of the most encountered abdominal emergencies worldwide. Proper clinical diagnosis and appendicectomy with minimal post operative complications are therefore priorities. Aim of this study was to ascertain the overall management of acute appendicitis in Sri Lanka in special preference to delayed primary suturing of the surgical site, comparing other local and international treatment outcomes. Data were collected prospectively from 155 patients who underwent appendicectomy following clinical and radiological diagnosis with ultrasonography. Histological assessment was done for all the specimens. All perforated appendices were managed with delayed primary closure. Patients were followed up for 28 days to assess complications. Mean age of patient presentation was 27 years; mean pre-operative waiting time following admission was 24 hours; average hospital stay was 72 hours; accuracy of clinical diagnosis of appendicitis as confirmed by histology was 87.1%; post operative wound infection rate was 8.3%, and among them 5% had perforated appendices; 4 patients had post operative complications managed without re-opening. There was no fistula formation or mortality reported. Current study was compared with previously published data: a comparison on management of acute appendicitis in Sri Lanka vs. United Kingdom (UK). The diagnosis of current study was equally accurate, but post operative complications were significantly reduced - (current study-9.6%, compared Sri Lankan study-16.4%; compared UK study-14.1%). During the recent years, there has been an exponential rise in the use of Computerised Tomography (CT) imaging in the assessment of patients with acute appendicitis. Even though, the diagnostic accuracy without using CT, and treatment outcome of acute appendicitis in this study match other local studies as well as with data compared to UK. Therefore CT usage has not increased the diagnostic accuracy of acute appendicitis significantly. Especially, delayed primary closure may have reduced post operative wound infection rate for ruptured appendices, therefore suggest this approach for further evaluation as a safer and an effective practice in other hospitals worldwide as well.

Keywords : acute appendicitis, computerised tomography, diagnostic accuracy, delayed primary closure

Conference Title : ICTS 2018 : International Conference on Transplantation and Surgery

Conference Location : Kuala Lumpur, Malaysia

Conference Dates : February 12-13, 2018