Title:
Assessment of efficacy of ultrasound in patients with abdominal pain and who are suspected of acute appendicitis in hospital Dr Shariati of Isfahan

Abstract:
This study was retrospective. All patients with abdominal pain (suspected acute appendicitis) investigated in Dr Shariati Hospital of Isfahan in 2015. The total number of patients admitted be 595 people. Among of 268 patients who didn't undergo surgery, 122 ultrasound was done for them the results of which consists of: 91% real negative, 9% false positives, 34/5% cases ultrasound demonstrated differential diagnosis other (true positive) and in 65/5% cases ultrasound rejected the differential diagnosis (true negative). According to the surgeon in the operation history sheet, among of patients who underwent surgery were 67% acute appendicitis simple, 8/5% gangrenous appendicitis, 21/4% perforated appendicitis and 31% other diagnosis such as hemorrhagic ovarian cyst, acute cholecystitis and etc. According to pathology results, negative appendectomy rate for patients who underwent surgery was %20/5. The results of ultrasound in patients undergoing surgery illustrated that 61/7% true positive, 38/3% false negative, 24% false positive, 76% negative and ultrasound results in relation to differential diagnosis include of 2% false-positive, 40% false negative, 60% positive and 98% negative real. Generally, ultrasound among patients underwent surgery and who didn't undergo surgery regarding the diagnosis of acute appendicitis, had a sensitivity of 61/7% and specificity of 88/4%. Also the sensitivity and specificity of ultrasound in association with differential diagnosis was 96% of 99 percent.

Keywords:
efficacy of ultrasound, patients with abdominal pain and who are suspected of acute appendicitis, hospital Dr Shariati