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Abdelwahid
2008
I dedicate this research to:
My parents, wife, sons, family,
&
Friends.

Abdelwahid 2008
Abstract
A total of 80 patients presented by acute scrotum were studied at AL Falah International Hospital, Riyadh, KSA. Their ages ranged from 10 to 67 years old (mean age of 26.5 years). After clinical examination, CRP was measured in the sera of all cases. Scrotal ultrasound (USS) with color Doppler studies (CDS) was used to evaluate all cases. The results of sonographic diagnosis were correlated with those of the final diagnosis obtained after surgical management or medical treatment with follow up data.

USS with CDS accurately diagnosed 75 (93.75%) patients and misdiagnosed 5 (6.25%) patients [2 patients of epididymo-orchitis, 2 patients of testicular torsion and one patient of rupture testis]. Epididymo-orchitis was found in 45 patients (56.25%). Testicular torsion was detected in 13 patients (16.25%) and other etiologies for acute scrotal pain were found in 22 patients (27.5%) and included: 8 patients of incarcerated hernias, 6 patients of hematoceles 4 patients of rupture testis and 4 patients of infected hydroceles. The testis was salvaged in 61.5% of patients with testicular torsion. Orchiectomy was required in 5 patients due to testicular gangrene. The ages of the patients, duration of pain <12 hours, nausea, vomiting, dysuria, tender epididymis, normal testicular lie and absent cremasteric reflex showed statistical significance between patients with testicular torsion and those with epididymo-orchitis. There was at least a 4-fold elevation of CRP in 42 (93.3%) patients with epididymo-orchitis (median 63.2 mg/l). Patients with a testicular torsion had no significant elevation of CRP (median 8 mg/l) except in only four cases (30.8%).

USS with CDS was able to accurately define the cause of acute scrotal pain in a good percentage of patients. CRP appeared useful in differentiation of torsion from acute inflammatory scrotal conditions.

IV
هذه الدراسة تمثل في مستشفى الفلاح الدولي بالمملكة العربية السعودية (الرياض)، أجريت في عيداً عديداً بقدرها (80) مريضاً، وحضرت للمستشفى بشكوى الأم حادة بالخصية، واعمارهم تتراوح بين (10 - 67) سنة، وعملت لهم الفحوصات السريرية والفحوصات المخبرية مثل (بروتينات سي المتغيرة) وقُورنت تلك الفحوصات مع التشخيص الذي أجري بالموجات فوق الصوتية إضافة إلى استخدام موجات الشرايين (دوبار) وتقييم كل الحالات التي يصدح الدراسة. فالتشخيص بالموجات فوق الصوتية مقارنة مع التشخيص النهائي الذي بنى عليه المعالجة الجراحية والمعالجة الدوائية مع المتابعة. فكانت النتيجة 75 مريضاً أي بنسبة 93,75% من مجموع المرضى كان تشخيصاً صحيحاً ومنطابق مع تشخيص الموجات فوق الصوتية مع الدوبار. أما خمسة حالات فقط، أو نسبة 6,25% كان خطأ تشخيصي وتفاصيلها كما يلي: -

فمرتين على جهاز بالتهاب خصية، ومريض واحد على شخص بتمزق خصية.

خلصت هذه الدراسة إلى أن التشخيص بالموجات فوق الصوتية مع الدوبار موثوق ودقيق وقناة مفيدة في التمييز بين حالات التهاب الخصية من حالات الالتهاب.

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بالإنجليزية:

This study was conducted at the Fahad Hospital International in the Kingdom of Saudi Arabia (Riyadh), performed on several occasions at a rate of (80) patients. They presented to the hospital with a history of acute abdominal pain, and their ages ranged between (10 - 67) years. They underwent physical examinations and laboratory tests such as (serum proteins). These tests were compared with the diagnosis that was done using ultrasound waves (Doppler). The study evaluated all cases that met the study criteria. The ultrasound waves were compared with the final diagnosis that was made based on surgical and medical treatment. The study found that 75 patients, or 93.75% of the total patients, had a correct diagnosis and were consistent with the ultrasound waves. However, five cases, or 6.25% of the total patients, had a diagnostic error. These cases included two cases of appendicitis, one case of ovarian cyst, and one case of fluid accumulation. As a result, this study concluded that using ultrasound waves with Doppler is a reliable and accurate diagnostic tool in distinguishing cases of appendicitis from cases of acute abdominal pain.