

Role of Laparoscopic Peritoneal Biopsy in the Diagnosis of Peritoneal Tuberculosis. A Seven-Year Experience

A. Abdelaal¹, R. Alfkey¹, S. Abdelaziem¹, M. Abunada¹, A. Alfaky¹, W. H Ibrahim², A. Toro³, I. Di Carlo^{1,4}

¹Department of General Surgery, Hamad General Hospital, Doha, Qatar

²Department of Medicine Hamad General Hospital, Doha, Qatar

³Department of Surgery, Taormina Hospital, Italy

⁴Department of Surgical Sciences, O.T. and A.T., University of Catania, Italy

Abstract

The diagnosis of asymptomatic abdominal tuberculosis, without characteristic laboratory and radiologic findings, is difficult. We therefore investigated the role of diagnostic laparoscopy in patients with suspected peritoneal tuberculosis (PTB). Patients admitted to Hamad General Hospital, Qatar, who underwent laparoscopic peritoneal biopsy for suspected PTB from January 2004 to December 2010 were retrospectively analysed. Factors assessed included patient age, sex, symptoms, clinical signs, CT scan findings, laparoscopic findings and histopathological diagnosis. A total of 41 patients, 33 males (80.5%) and 8 females (19.5%), of mean age 31 years, underwent laparoscopic peritoneal biopsy for suspected PTB during the study period. Abdominal pain was the most common presenting symptom, observed in 33 (80.5%) patients. Computerized tomography (CT) of the abdomen showed ascites in 37 patients (90%), bowel nodules in 22 (54%), peritoneal thickening and nodules in 37 (90%) and enlarged mesenteric lymph nodes in 11 (27%). The classical gross laparoscopic appearance of peritoneal tuberculosis was observed in 38 patients (93%), whereas laparoscopic findings were normal in 3 patients (7%). Histopathological results confirmed granulo-matous inflammation in 38 patients (93%). The sensitivity and specificity of gross laparoscopic appearance in diagnosing peritoneal TB were both 100%. Two patients experienced complications from laparoscopy (5%), but there were no laparoscopy-related deaths. Laparoscopic peritoneal biopsy is a rapid and safe method of accurately diagnosing PTB.

Key words: laparoscopy, peritoneal tuberculosis, granuloma

Corresponding author: Abdelrahman Abdelaal, MD
Consultant General Surgeon
Department of General Surgery
Hamad General Hospital, Doha, Qatar
P.O. BOX 3050
E-mail: alnamrout1961@hotmail.com
aabdelaal1@web.de