Diagnostic algorithm for abdominal tuberculosis

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Abstract

Background: Diagnosing abdominal tuberculosis remains a great challenge even for experienced clinicians. It is a great mimicker that has unusual presentations. Clinical and radiological findings of abdominal tuberculosis are non-specific.

Aim: To report the lessons we have learned over the last 30 years from 59 cases of abdominal tuberculosis to develop a diagnostic algorithm for this disease.

Methods: The diagnostic workup depends on categorizing the clinical and radiological findings of abdominal tuberculosis into five different categories including 1) gastrointestinal 2) solid organ lesions 3) lymphadenopathy, 4) wet peritonitis, and 5) dry/fixed peritonitis. The diagnosis in gastrointestinal tuberculosis and dry peritonitis can be reached by endoscopy. The diagnosis in solid organ lesions can be reached by ultrasound-guided aspiration. The diagnosis in wet peritonitis and lymphadenopathy can be reached by ultrasound-guided aspiration followed by laparoscopy if needed. Diagnostic laparotomy should be kept as the last option for achieving a histological diagnosis. Capsule endoscopy and enteroscopy were not included in the diagnostic algorithm because of the limited data of using these modalities in abdominal tuberculosis. They needs special expertise, and rarely used in low and middle income countries. Furthermore, capsule endoscopy may cause complete intestinal obstruction in small bowel strictures.

Results: Definite diagnosis can be reached in 80% of the patients. Therapeutic diagnosis should be tried in the remaining 20%.

Conclusions: A high index of suspicion is essential for diagnosing abdominal tuberculosis. The suggested diagnostic algorithm will help reaching the proper diagnosis of abdominal tuberculosis.