## Gallbladder tuberculosis camouflaging as gallbladder cancer – case series and review focussing on treatment

Gautham Krishnamurthy, Harjeet Singh, Jayapal Rajendran, Vishal Sharma, Thakur Deen Yadav, Balan Louis Gaspar, Rakesh Kumar Vasishta and Rajinder Singh

## Abstract:

**Introduction:** Gallbladder tuberculosis, in an endemic region, is a common infectious etiology affecting a rare organ. The high prevalence of carcinoma gallbladder in the endemic regions of tuberculosis, like India, poses diagnostic dilemma.

**Case series:** We are reporting three cases of gallbladder tuberculosis mimicking carcinoma gallbladder of which the first two cases were operated with a presumptive diagnosis of malignancy. The third case presented to us after laparoscopic cholecystectomy elsewhere and on evaluation was found to have disseminated tuberculosis.

**Discussion:** The lack of pathognomonic clinical and radiological characters results in histological surprise of gallbladder tuberculosis following surgery performed for other indications like malignancy. In preoperatively diagnosed patients medical management plays pivotal role in management. Surgery is required in symptomatic patients. On the other hand, histologically proven cases following surgical resection require antitubercular therapy. **Conclusion:** Previous history of tuberculosis or concomitant tuberculosis at other sites may provide clue to the diagnosis of biliary tuberculosis. Antitubercular treatment after surgery plays an important role in preventing further dissemination.

*Keywords:* gallbladder tuberculosis, carcinoma gallbladder, antitubercular therapy, radical cholecystectomy

## Introduction

Gallbladder tuberculosis is a well-recognised rare infectious disease [Saluja et al. 2007]. In the endemic regions of tuberculosis, this pathology remains a part of differential diagnosis in managing patients with disease of any organ system. [Sia and Wieland, 2011]. The infection, though it primarily affects the lungs, can affect any system and mimic variety of conditions, including malignancy [Pitlik et al. 1984]. Tha gallbladder is relatively immune to tubercular infection [Tauro et al. 2008]. Up to 2010, around 120 cases have been reported in the published English literature [Xu et al. 2011]. Diagnosis based on clinical examination and imaging is challenging [Jain et al. 1995]. The preoperative diagnosis, though rarely made, can save the patient from a radical surgery done for suspected carcinoma gallbladder. High incidence of needle tract seeding in carcinoma gallbladder precludes preoperative tissue sampling to differentiate these two entities [Kumar et al. 2012]. We present three cases of gallbladder tuberculosis diagnosed postoperatively following histological examination. Two of the patients had radical surgery for presumed carcinoma gallbladder and the other had laparoscopic cholecystectomy for symptomatic gallstone disease.

## Case 1

A 62-year-old man, a known diabetic patient and recently diagnosed with hypertension, presented with complaints of vague dull aching pain in the right upper quadrant with significant loss of weight and appetite. The patient had pulmonary tuberculosis 10 years back, for which he received full course of first-line antitubercular treatment. General and physical examinations were unremarkable. Routine biochemical investigations were within normal limits except for elevated alkaline phosphatase (ALP – 312 IU/ml). Ultrasound of the abdomen revealed contracted gallbladder with irregular wall thickening (4-6 mm) and associated 19.2 mm

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Correspondence to: Harjeet Singh Post Graduate Institute of Medical, Education and Research, Chandigarh 160012, India. harjeetsingh1982@gmail. com Gautham Krishnamurthy.

Gautham Krishnamurthy, MS, MRCS Harjeet Singh, MS, MCh Jayapal Rajendran, MS Vishal Sharma, MD, DM Thakur Deen Yadav, MS Balan Louis Gaspar, MD Rakesh Kumar Vasishta, MD, FRCPath Rajinder Singh, MS Postgraduate Institute of Medical Education and Research, Chandigarh, India