INTRODUCTION
Gall-stone disease remains one of the most common medical problems leading to surgical intervention. Its incidence increases with age, 20% over 40 years and 30% above 70 years are affected, with male to female ratio of about 1:4. Gall-stones may be asymptomatic, symptomatic, with chronic cholecystitis, acute cholecystitis or with other complications. Gall-stone passes through cystic duct then common bile duct into duodenum or the gallbladder forms fistula with duodenum (choledochoduodenal fistula) or (cholecystocolic fistula) with large gut and stones pass into the gut where it may obstruct the narrowest portion of the gut. Naturally, gall-stone ileus occur in upto 2-20% of cases, where no fistula is found in elderly. The terminal ileum is affected in 70% of cases and less commonly the duodenum.

Tuberculosis is a contagious disease, caused by Mycobacterium tuberculosis and spreads through droplet infection. Each year, 8 million people develop active tuberculosis out of whom 3 million die, the largest number of cases occur in South-East Asia, which accounts for 33%. Abdomen is very common site of TB involvement in Pakistan. The bacilli reside in the wall of intestine, mesentery or peritoneum and may present later with complications especially with acute and subacute intestinal obstruction due to mass (tuberculoma) or stricture formation in the small gut and ileocecal region. Different surgical procedures have been advocated to relieve the strictures, like resection and anastomosis, by-pass procedures and recently stricturoplasty and chemotherapy.

CASE REPORT
An 80-year-old female patient presented with abdominal pain for the last few days. She also gave history of constipation for the last few years. On examination, she was weak, emaciated and pale. Her pulse was 100 beats/min and her B.P was 100/70 mmHg. She had a disloaded abdomen tender with exaggerated bowel sounds. The rectum was empty on digital rectal examination. Ultrasonography showed multiple stones in gallbladder and no stones in urinary bladder. X-rays abdomen erect showed multiple radio-opaque shadows in pelvic region with air fluid levels and pneumobilia as shown in Figure 1.

Patient was explored via a midline incision. Multiple strictures in the small intestine were seen with stones impacted at different sites proximal to strictures (Figure 2). The distal stricture was not patent so enterotomy was performed. All the stones were squeezed through this enterotomy and a piece of intestine was taken for histopathology (Figure 3). The enterotomy was closed by stricturoplasty method. The patient was put on anti-tuberculous drugs. The histopathological report confirmed the diagnosis of tuberculosis of intestine. The patient responded well to Anti-tuberculosis Therapy (ATT).

abstract
Gall-stone ileus associated with tuberculous strictures is an uncommon cause of bowel obstruction related to a cholecystoenteric fistula. The stone usually obstructs the narrowest part of the intestine. The patient whose intestine is strictured due to tuberculosis or other disease, the stone can impact that part of the strictured area. We report such a case of gall-stone ileus in a patient of 80 years with multiple tuberculous strictures. After surgery, she responded to anti-tuberculous drugs and did well.

Key words: Cholelithiasis. Gall-stones ileus. Tuberculous strictures.
Keeping in view the patient’s condition at the time, prolonged surgery was defined and cholecystectomy and fistula (between duodenum and gallbladder) repair were performed later on after 4 months.

**DISCUSSION**

Gall-stone ileus is a disease of elderly, causing up to one fourth of non-strangulation intestinal obstruction in patients older than 65 years of age, which is often missed or diagnosed late. The presentation is that of intestinal obstruction preceded by biliary complaints. The radiological features on plain x-rays include features of intestinal obstruction and pneumobilia and aberrant gall-stones. Treatment depends upon the site of the impacted stone, but surgery is needed in many cases. As it affects the elderly, mortality and morbidity is high, though it is improving over the years. Early diagnosis and treatment improve the outcome of the situation.12,15

It is an uncommon form of intestinal obstruction (2.71%)3 usually related to choledochoenteric fistula but some times without fistula in 2 to 20% of cases.2

One of the complications of endoscopic sphincterotomies is also gall-stone ileus, likewise in Kasai procedure using a stapled antireflux valve.15,16 The obstruction usually occurs in the narrowest part of the gut usually the distal ileum but in diseased gut like in Crohn’s disease and tuberculosis, it can obstruct any diseased portion of the gut.17

Tuberculosis has re-emerged as a devastating disease during the last decade with a high morbidity and mortality. Pakistan ranks among the five nations that accounts for more than 50% of tuberculous cases worldwide and it is thought to be fourth major cause of death in Pakistan.6,13,14 Although, it may affect any region, abdomen is a common site of involvement. In Pakistan, T.B has been reported as a 2nd commonest cause of intestinal obstruction.14

The patient usually presents with acute and subacute intestinal obstruction so diagnosis is not straightforward. Furthermore, the gall-stones are radiolucent, however, as the stone passes through the fistula, food material is deposited over it and so is calcium, it become radiopaque. and on plain X-ray, it becomes visible when it causes obstruction/ileus then there will be signs of intestinal obstruction.2,4,6,15 Ultrasoundography may exclude the stones in the urinary bladder and show stones in the gallbladder and stones in the lower abdomen and urinary bladder.2,16

Yu in 2005 studied 165 cases with subacute obstruction and found that there were 14 cases due to gall-stone obstruction. This study was based on CT examination of abdomen for abdominal obstruction. The diagnostic criteria were: (1) Small Bowel Obstruction (SBO); (2) Ectopic gall-stone, either rim calcified or total calcified and (3) abnormal gallbladder with complete air collections and presence of air fluid level.18

Management is based upon condition of the patient. In the very aged and ill patients, who present with acute intestinal obstruction, enterololithotomy, stenting, endoscopic retrograde cholangiopancreatography and surgery are advocated.17 If the condition of the patient is well and present with subacute intestinal obstruction then the procedure is enterololithotomy, cholecystectomy and closure of fistula at the same time.4,17

Moberg and Montgomery recommended enterolithotomy as a single procedure that minimizes the complications.19

**REFERENCES**


