INTRODUCTION
Gossypiboma / textiloma / gauzioma, a retained gauze piece, is a rare surgical complication.1 The incidence of Retained Surgical Sponge (RSS) is much higher than reported in literature due to medico-legal complications.2 It acts as a foreign body and may cause abdominal or pelvic abscess, fistula formation or transmurally migrate through the bowel wall.3 Retained surgical sponge may present early after an operation or may remain silent for years and then present later. It is an avoidable complication which can result in considerable morbidity and mortality.

This report describes the condition in an adult lady following hysterectomy.

CASE REPORT
A 35 years old lady presented with complaints of colicky abdominal pain in left iliac fossa and hypogastrium for one week, relative constipation and tenesmus. The patient had a past history of intrauterine death 8 months back for which she had to undergo a dilatation and curettage followed by a subsequent hysterectomy because of uncontrolled bleeding.

Examination was remarkable for tenderness in left iliac fossa. Rest of the examination was unremarkable. Abdominal ultrasound showed distended small bowel and descending colon. There was no evidence of free peritoneal fluid or abdominal or pelvic abscess.

CT scan showed acute inflammation of sigmoid colon with severe narrowing of the rectosigmoid junction and gross retrospective dilatation of colon. A large foreign body with a rim enhancement was seen at the level of sigmoid colon (Figure 1).

Colonoscopy was done which showed a foreign body obstructing the lumen of the rectosigmoid junction approximately 20 cm from the anal verge (Figure 2). On attempt to take a biopsy specimen, cotton fibres were pulled out of the object. This confirmed our suspicion that it could be a retained sponge or gossypiboma. Attempts were made to remove the foreign body through colonoscopy but it could not be extracted easily, hence a decision was taken to go for a formal laparotomy.

On exploration, there were dense adhesions between sigmoid colon and small bowel which were carefully separated. The continuity of the bowel wall was found to be intact. A lump could be palpated in the sigmoid colon which was pushed downwards in the rectum and was simultaneously pulled via sigmoidoscopy. Result was a delivery of a large abdominal pack per-rectum. The patient did fine postoperatively and was discharged on the third postoperative day.

DISCUSSION
RSS is also known as gossypiboma, which means a mass of cotton matrix retained within the human body.1 (Gossypium: latin word meaning cotton and Boma: Swahili word meaning place of concealment). It can also...
be called textiloma, gauzioma or simply retained foreign body. The incidence is reported to vary between 1 in 3000 to 1 in 100 surgeries. According to one estimate, 80% cases are not reported because of medicolegal concerns.

RSS can produce two types of foreign body reactions. An aseptic fibrinous response which can form a granuloma or pseudotumor and usually follows a silent course. The rest follow an exudative response which leads to abscess formation and produces symptoms. The RSS may go undetected up to years or may result in intestinal obstruction, fistula formation, peritonitis, abscess formation, spontaneous expulsion, erosion into a neighboring blood vessel, transmural migration into small bowel, stomach, large bowel or urinary bladder and 10% mortality.

The intestinal tract represents a weak line of resistance through which defense mechanisms in peritoneal cavity attempt to expel a retained surgical sponge. There are reported successful expulsions of sponge through rectum depending on size of sponge small enough to pass through ileocaecal junction or by direct penetration of colorectum.

Diagnosis of RSS can be made with the help of X-rays if there is a radio-opaque marker in the sponge. Sonographically, RSS are echogenic and they create an intensive and sharply demarcated acoustic shadow. On CT scan, in addition to spongiform bubble, a low density mass with prominent rim enhancement may suggest a retained surgical sponge granuloma; also referred to as CT whirl sign. MRI can be helpful which shows RSS as a mass with capsule showing high intensity signal.

This unwanted complication can be prevented by using standard sponge packing systems, accurate, repeated and reproducible counts of surgical instruments and sponges, avoiding use of sponges without radio-opaque markers and small surgical sponges, radiographs of the anatomic region while patient is still in operating room.

Now specialized radio-frequency system, consisting of radio-frequency detector and radio-frequency labeled surgical sponges has also been introduced. But despite all these precautions, RSS still remains a complication. Once discovered, RSS is best removed surgically by laparotomy. However, it can also be removed by laparoscopy or endoscopically. The authors suggest that where advanced and expensive radio-frequency tagging system may not be practical but introduction of WHO Safety Checklist for operation theatres can be a useful adjunct in prevention of such mishaps as retained surgical foreign bodies. This is a simple checklist for theatre personnel including doctors and nursing staff and helps in repeated counts of sponges and instruments at the end of the operation. Thus, it is one easy and cost effective way of standardizing theatre protocols.

REFERENCES