Case Report

A 32 years regularly menstruating woman during her regular checkup was diagnosed incidentally to have a big complex pelvic mass on ultrasonogram, suspected as hydatid cyst. She was asymptomatic.

Investigations done showed total count being 16000/mm³ and ESR 26mm/hr. Except CA125 (=89ng/ml), all her tumor markers (CEA, AFP, LDH, β-hCG) were within normal range. Magnetic resonance imaging (MRI) done was in favor of hydatid cyst of pelvis.

She was a para second lady; both were normal vaginal deliveries in hospital. She gave history of laparotomy done two years back for ectopic pregnancy. She had history of severe abdominal pain then. According to the patient, it was negative laparotomy (there was no ectopic pregnancy). Her post-operative period then was uneventful.

With preoperative diagnosis of hydatid cyst of pelvis, counseling for surgery was done. During laparotomy the findings were surprising. Though it was a difficult approach, after meticulous adhesiolysis a cystic encapsulated mass was found, which ruptured during the dissection releasing straw colored fluid. A net like solid structure was visible. It was a retained gauze. Postoperatively she had no issues and recovered uneventfully.

Discussion

Gossypiboma remains a dreadful experience. Incidence is 12 per 100,000 operations. However due to legal issues its exact incidence is still
unknown. Regarding surgical procedures, it occurs mainly in emergency operations. It is also seen in surgeries of paraspinal muscles, intrathoracic regions, legs, shoulder and pericardial space\textsuperscript{3,4}. Obesity of the patients, change in the surgical team in between procedures, improper and hurried counting of surgical goods at the end of procedures, long operations, inexperienced and inadequate staff numbers also contribute to the issue\textsuperscript{5}.

Usually patients present in two forms: Symptomatic and asymptomatic. Symptoms arise due to the exudative reaction leading to abscess formation. Patients complain of pain abdomen, abdominal distension, fever, nausea and vomiting. Some remain asymptomatic or present with pseudo tumor syndrome\textsuperscript{6}. In our case also, the patient was asymptomatic and diagnosed to have hydatid cyst of pelvis. This could be because of the fibrinous reaction that occurred leading to encapsulation of the foreign body mimicking a tumor.

In a country like ours where there are no radio-labeled sponges, it is very difficult to give a definitive diagnosis preoperatively. Radiological examination like ultrasonogram (USG), computerized tomography scan (CT scan) and MRI are usually done\textsuperscript{1}. However, chronic cases like the one reported in this article do not show definite clinical and radiological signs. Patient had no symptoms and MRI favored hydatid cyst of ovary.

So, pre-operative diagnosis can be indeterminate. Usually it is seen that 75\% of the gossypiboma are diagnosed only intraoperatively, similar to our case\textsuperscript{7}.

Surgical management is the definitive treatment. It involves adhesiolysis, drainage, and evacuation of abscess cavities, proximal diversion and resection anastomosis\textsuperscript{8}. Complications like sepsis, intestinal obstruction, intra luminal transmigration, fistulization and perforation were not present in our case. Adhesiolysis and drainage of loculated collection followed by removal of gauze was performed.

The dictum “Prevention is always better than cure” holds true for gossypiboma as it is a very serious medicolegal issue. The heavy penalty for the surgeons is his/her years of earned reputation. Approximately 88\% of cases occur in a situation where the sponge and instrument counts were declared “correct”\textsuperscript{9}. So one needs to ensure proper count through experienced staffs, at least prior to and at the end of the procedure. Re-screening of high risk patients even if counts are documented correct will help in preventing such errors. If possible, use of surgical gauze sponges, which have been tagged with a radiofrequency identification (RFID) chip scanned with a barcode scanner can also help in early detection\textsuperscript{10}.
Conclusion

Gossypiboma, a preventable human error, can be decreased by improvement in patients care process and standardized count protocols. Though a rare entity, it should be considered as a differential diagnosis in patients presenting with pelvic mass. Subsequent surgical management will prevent severe morbidity and mortality in patients.

References

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