

## Case Report

# Port site tuberculosis and retained gall stone after laparoscopic cholecystectomy

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## ABSTRACT

Laparoscopic cholecystectomy is one of the most common general surgical procedures performed. Port site infection is common surgical site infection. However, tuberculosis of port sites is very uncommon. We report a case of a 36-year-old lady who was presented to our center with complaint of swelling at midclavicular port and seropurulent discharge from epigastrium port site for one month after laparoscopic cholecystectomy done outside. Patient underwent wide local excision with stone retrieval and histopathology of specimen was suggestive of chronic inflammation. Following excision patient again develop swelling at scar site and FNAC from swelling reveal feature of tuberculosis, subsequently patient was started on anti-tubercular drug therapy and follow-up after 2 months show healthy suture line with no sinus or discharge or swelling. Port site tuberculosis in absence of tuberculosis of gall bladder and abdominal is most likely due to contamination of instrument or dressing by mycobacterium tuberculosis. Diagnosis is made by ZN staining or FNAC or biopsy. Management includes incision and drainage or debridement or wide local excision with anti-tuberculosis medication. Following standardized sterilization procedure is essential for prevention.

**Keywords:** Port site tuberculosis, Post laparoscopic cholecystectomy, Sterilization, Retained stone

## INTRODUCTION

Laparoscopic cholecystectomy is one of the most common general surgical procedures performed.

Surgical site bacterial infection at port site is common but tuberculosis of port site is very uncommon.<sup>1,2</sup>

Most commonly it occurs due to instruments contaminated with mycobacterium tuberculosis due to breach in sterilization. Other causes include tuberculosis of gall bladder or other abdominal organ tuberculosis co existing at the time of procedure.

## CASE REPORT

A 36 year old lady presented to our tertiary care center Lady Hardinge Medical College and associated Smt Sucheta Kriplani Hospital, New delhi, India with complain of swelling at mid-clavicular port (Figure 1) and sinus with sero-purulent discharge from epigastric port site (Figure 2), one months after laparoscopic cholecystectomy done outside our hospital. CECT abdomen (Figure 3) show anterior abdominal wall collection with extension till peritoneum and subsequently wide local excision (Figure 4) with primary closure of defect was done and histopathology of excision specimen show feature of

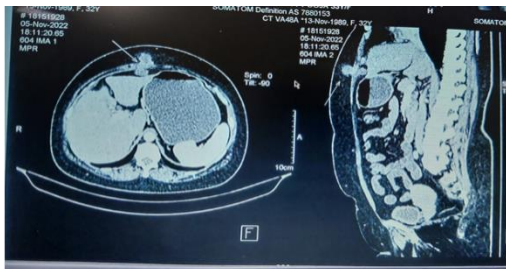
chronic inflammation- fibroadipose tissue showing lympho-histiocytic inflammatory infiltrate along with chronic granulation tissue (Figure 5). Patient again develops swelling at scar site (Figure 6) and FNAC from recurrent swelling shows acid fast bacilli on Ziehl Neelsen stain (Figure 7). Previous record shows no histopathological evidence of tuberculosis in gall bladder and no abdominal tuberculosis. Patient was started on Anti tubercular drug therapy. Follow up after 2 months shows healthy stitch line and no discharge or swelling.



**Figure 1: Swelling at mid-clavicular port site.**



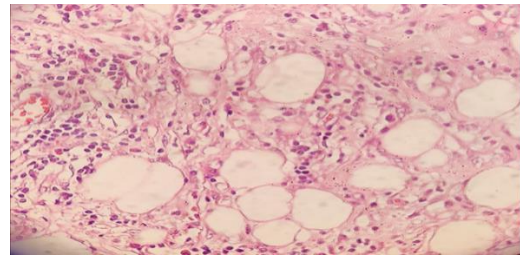
**Figure 2: Sinus with discharge from epigastric port site.**



**Figure 3: CECT abdomen show loculated anterior abdominal wall collection with extension till peritoneum.**



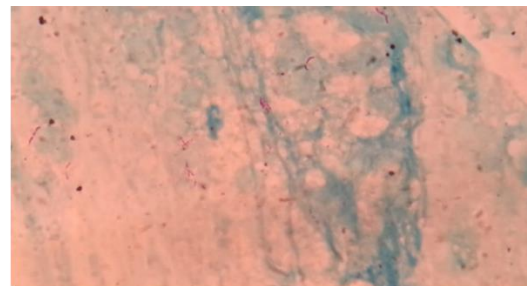
**Figure 4: Wide local excised specimen with retained gall stone.**



**Figure 5: WLE specimen histopath (40×image) showing fibroadipose tissue showing lympho-histiocytic inflammatory infiltrate along with chronic granulation tissue.**



**Figure 6: Recurrent swelling at scar site.**



**Figure 7: FNAC from recurrent swelling shows acid fast bacilli on Ziehl Neelsen stained smear.**

## DISCUSSION

Port site infections are very commonly seen but tuberculosis at port site is very uncommon. In our case, we first did wide local excision of sinus with swelling and biopsy shows feature of chronic inflammations. Our patient again develops swelling at previous site and FNAC from recurrent swelling reveals features of tuberculosis. Previous studies shows that initial investigations including pus AFB and pus culture were negative and biopsy provide the diagnosis.<sup>1-4</sup>

After FNAC our patient was started on anti-tubercular treatment and follow up after two months shows no swelling or sinus or discharge. Previous studies also showed anti-tubercular therapy was the best treatment modality.<sup>5-8</sup> Since in our case there were no signs of tuberculosis in gall bladder and no evidence of other

abdominal tuberculosis, we assume that the source of infection was poorly sterilized instruments, which is also seen in previous studies.<sup>6-8</sup>

## CONCLUSION

Port site tuberculosis in absence of tuberculosis of gall bladder and abdominal is most likely due to contamination of instrument or dressing by mycobacterium tuberculosis due to faulty sterilization technique. FNAC from collection or biopsy or culture helps in achieving diagnosis. Management includes incision and drainage, debridement, wide local excision along with ant tubercular drug therapy.

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