International Journal of Science and Research (IJSR)
ISSN: 2319-7064
SJIF (2022): 7.942

Excision of Sinus Tract Following Laparoscopic Cholecystectomy Presenting with Persisting Discharge-A Rare Case Report

Dr. Biswaranjan Mohapatra, Dr Gopal Panda, Dr. Jyotiprakash Biswal, Dr. B Laxmikanta Sahoo

Abstract: ***Laparoscopic port-site infections, though infrequent, undermine the advantages provided by minimally invasive surgeries. Persistent nonhealing discharging sinuses, not responding to conventional antibiotic therapy, pose diagnostic and therapeutic challenges. Sizeable number of these infections is caused by rapidly growing tuberculous mycobacteria (TM), and diagnosing these requires a high index of suspicion. We present a case of epigastric port-site infection with persistent discharge following laparoscopic cholecystectomy.***

Keywords: Cholecystectomy, HPE of sinus tract-chronic granulomatous inflammation with central cessation, Tubuerculus Mycobacterium

1. Introduction

- Laparoscopic cholecystectomy has become the gold standard treatment for symptomatic gall stones.
- Surgical site infection at port sites following lap-cholecystectomy is not uncommon now a days.[1] However, port site tuberculosis following same is a rare complication.[2]
- Here, we are reporting a case of a young female who underwent laparoscopic cholecystectomy outside our hospital and developed persistent discharging sinus at epigastric port site.

2. Materials & Methods

Case Discussion

- A 32 year old female with a history of laparoscopic cholecystectomy 5 months back presented with complaints of purulent discharge from her epigastric port site wound.
- Following lap-cholecystectomy, her epigastric port site wound didn't heal even after 2 months and there she developed a discharging sinus. On examination, a small opening (1cm*1.5 cm) with purulent discharge was present. Margins undermined with unhealthy granulation tissue without induration or erythema.
- Wound debridement was done, pus sent for gram stain & pyogenic culture sensitivity. She was followed up on empirical antibiotics as culture was negative.
- After 1 month she revisited with same complain. Again, debridement was done and sample sent for gram stain, Z-N stain, pyogenic culture and BACTEC culture. All came out negative. Mantoux done with 2TU was negative.
- Ultrasonography of abdominal wall showed a sinus tract with mild collection in anterior abdominal wall without any communication to peritoneal cavity. Sinogram showed 4 cm sinus tract extending towards umbilicus without any communication to peritoneal cavity.
- There was no history of evening rise of temperature, weight loss, loss of appetite. Patient was non diabetic, non-hypertensive. General survey otherwise was normal so was other systemic examinations.

Management

- After proper pre-operative work-up excision of sinus tract was done with horizontal elliptical incision under general anaesthesia. Sample sent for histopathological examination. Post-operative period was again complicated by wound infection with pus mixed discharge. Though frequent dressings were done but there was no significant improvement.
- Finally, the HPE report of excised tract showed chronic granulomatous inflammation with central caseation.
- Antitubercular drug was started according to body weight under RNTCP.
- Wound then started to heal with ATD and regular dressing. She had no recurrence on follow up of three months.

3. Discussion

- Laparoscopic cholecystectomy has some specific risks related to laparoscopy in addition to those related with cholecystectomy. Port-site Mycobacterial infection generally occurs from endogenous, exogenous & haematogenous sources.
- As our patient had no history suggestive of active tuberculosis, possibility of transmission was more via exogenous route. She may get the infection via contaminated laparoscope sterilized improperly.
- However, it is widely accepted that 2% glutaraldehyde used as standard agent of reprocessing of laparoscopic instruments achieves high level of disinfection but not sterilisation.[3] Guidelines for reprocessing of laparoscopic instruments have not been standardized till date.
- The Minimal Access Therapy Documentation Working Group has recommended careful pre-cleaning and only 10 minutes soak in glutaraldehyde for lap instruments with longer time if tuberculosis suspected.[4]

4. Conclusion

- Mycobacterial infection at port site undermines the benefits of laparoscopic procedures.
- Current practices of immersing laparoscopic instruments should be reconsidered. These instruments should ideally be sterilized by autoclaving as this may be the only method of preventing such cases.

- Such cases are managed by careful excision of the sinus tract followed by Anti Tubercular Therapy and controlled by proper sterilization.

References

[1] Karthik S, Augustine AJ, Shibumon MM, Pai MV. Analysis of laparoscopic port site complications: A descriptive study. J Minim Access Surg 2013; 9: 59-64.
[2] Ramesh H, Prakash K, Lekha V, Jacob G, Venugopal A, Venugopal B. Port-site tuberculosis after laparoscopy: Report of eight cases. Surg Endosc 2003; 17: 930-2.
[3] Burns S, Edwards M, Jennings J, Jolly D, Kovac S, Lithauser D. Impact of variation in reprocessing invasive fibreoptic scopes on patient's outcomes. Infect Control Hosp Epidemiol Suppl1996; 42
[4] Aylife G (2000) Decontamination of minimally invasive fibreoptic scopes and accessories. J Hosp Infect 2000; 45: 263-277.
[5] Hawasli A, Schroder D, Rizzo J, Thusay M, Takach TJ, Thao U, Goncharova I. J Laparoendosc AdvSurg Tech
[6] A.2002 Apr; 12 (2): 123-8. doi: 10.1089/10926420252939664. PMID: 12019573

* Patient did not give consent for taking her picture.