## Abstract #P089 Not your usual Chest infection; C diff Empyema

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## • Background:

C diff is an intestinal organism with rare extra intestinal manifestations<sup>1</sup>. Here we present a case of C diff Empyema

## • Case report:

69 yo male with ESRD on HD and chronic dysphagia was seen in IP clinic for recurrent pleural effusion of unknown origin s/p indwelling catheter by radiology. It was first noted after ground-level fall in July where an indwelling catheter was placed by IR but never drained till he was admitted for pneumonia in September with worsening effusion. He underwent drainage from his IPC and was discharged without any further investigation of his pleural fluid. During his clinic visit, site of catheter looked abnormal, he was advised to be admitted to hospital where fluid was drained and culture grew C diff. IPC was removed and Chest tube was placed with copious drainage. Stool culture was negative, but this was collected after starting IV metronidazole, Esophagram and EGD were also performed to assess dysphagia and possible fistula as etiology with no significant findings. Post drainage resulted in pneumothorax ex vacuo, however, risks of surgery outweigh the benefits. Repeat repeat fluid cultures revealed no growth and the chest tube was removed. Patient was discharged home with close follow up.



Site of IPC

- Conclusion:
- Initially thought to be a commensal neonatal organism<sup>2</sup>, it was not till 1970s C Diff was associated with colitis<sup>3</sup>. Empyema is a very rare presentation of C diff infection. Precise mechanism of infection is unclear in our patient but bacteremia, disseminated infection and direct contamination of chest tube are reported mechanisms<sup>4</sup>. Most cases reported have been polymicrobial in nature but our patient had only C diff. This case should serve an important reminder for hygiene practice and care of Pleural catheter and careful selection to place an indwelling catheter.
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<sup>1.</sup>García-Lechuz JM, Hernangómez S, Juan RS, Peláez T, Alcalá L, Bouza E. Extra-intestinal infections caused by Clostridium difficile. Clin Microbiol Infect. 2001;7(8):453-457. doi:10.1046/j.1469-0691.2001.00313.x 2.Hall IC, O'Toole E. Intestinal flora in nwe-born infants. Am J Dis Child. 1935;49(2):390.3.Bartlett JG, Moon N, Chang TW, Taylor N, Onderdonk AB. Role of Clostridium difficile in antibiotic-associated pseudomembranous colitis.Gastroenterology. 1978 Nov;75(5):778–82.4.Hudson DA, Gibb AP, Gill MJ. Empyema caused by Clostridium difficile. Can J Infect Dis. 1999;10(2):170-171. doi:10.1155/1999/968940