

OTHER

POSTOPERATIVE NECROTIZING MYONECROSIS CAUSED BY CLOSTRIDIUM SORDELLII: A RARE CASE REPORT

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AIM

To describe a rare case of Clostridium sordellii (C. sordellii) myonecrosis following abdominal wall surgery, with emphasis on clinical presentation, diagnostic challenges, and treatment strategies.

MATERIAL & METHODS

A 45-year-old male underwent adhesiolysis for congenital small bowel adhesions.

Postoperatively, he developed fever (38.4°C), abdominal pain, and a malodorous wound with purulent exudate. Laboratory findings included leukocytosis (23.1 x10³/µL, 92% neutrophils), elevated CRP (212 mg/L), and procalcitonin (16 µg/L). Empirical antibiotics (Amoxicillin/clavulanic acid) failed, necessitating surgical re-exploration. Necrotizing infection was identified, and wound cultures tested positive for Escherichia coli and C. sordellii. Intravenous Piperacillin/Tazobactam plus Clindamycin was initiated, yielding significant clinical improvement.

RESULTS

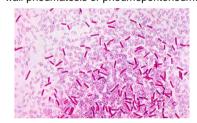
Timely surgical debridement combined with targeted antibiotics led to complete recovery. No systemic toxicity or toxic shock syndrome developed. At sixmonth follow-up, the patient was asymptomatic, with no signs of recurrence.



Distended small bowel loops, consistent with intestinal obstruction.



Abdominal CT shows small bowel obstruction without evidence of bowel wall pneumatosis or pneumoperitoneum.



CONCLUSIONS

C. sordellii, a rare anaerobic pathogen, can cause severe postoperative infections, including necrotizing myonecrosis. Prompt recognition and aggressive treatment, including surgical debridement and broad-spectrum antibiotics, are crucial for favorable outcomes. The rarity of C. sordellii infections, particularly outside gynecological contexts, highlights the need for heightened awareness in atypical cases. Early inclusion of anti-anaerobic coverage in empirical regimens for high-risk patients may improve prognosis. This case underscores the importance of rapid source control and multidisciplinary management in rare but life-threatening clostridial infections.

REFERENCES

1.Pence S, Joshi R, Shrestha K. Clostridium sordellii: A cause of toxic shock syndrome after a breach in the GI tract. Cureus. 2023;15(9):e45889. doi:10.7759/cureus.45889.

2.Aldape MJ, Bryant AE, Stevens DL. Clostridium sordellii infection: epidemiology, clinical findings, and current perspectives on diagnosis and treatment. Clin Infect Dis. 2006;43(11):1436-46. doi:10.1086/508773. 3.Lyons NB, Cohen BL, O'Neil CF Jr. Short versus long antibiotic duration for necrotizing soft tissue infection: a systematic review and meta-analysis. Surg Infect (Larchmt). 2023;24(5):425-32. doi:10.1089/sur.2022.252. 4.Cen H, Jin R, Yin J, Wang X. Risk factors for predicting mortality and amputation of patients with necrotizing soft-tissue infections: retrospective analysis of 111 cases from a single medical center. Emerg Med Int. 2023;2023:6316896. doi:10.1155/2023/6316896.

5. Chiang KJ, Wang YT, Kang E, Lin MC, Hsieh YC, Yeh TS. Is prompt hyperbaric oxygen adjunctive therapy able to reduce mortality and amputation in management of necrotizing soft-tissue infection? Surg Infect (Larchmt). 2024;25(6):659-67. doi:10.1089/sur.2023.180.