Short Communication

A rare case of Candida perforation peritonitis following analgesic use for fracture lower limb.

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Fungal microorganisms as a cause of gastric perforation, is very rare. We are reporting a case of perforation peritonitis in a 60 year old male patient after fracture of right lower limb for which he was given analgesics. An emergency exploratory laparotomy was performed and a pre-pyloric gastric perforation repair was done with Modified Graham’s patch. Pus drained revealed budding yeast cells with pseudohyphae suggesting Candida albicans on further processing. Fluconazole added to the treatment regimen along with piperacillin-tazobactam and metronidazole. Patient responded well to the treatment regimen and was discharged from hospital after 2 weeks of hospitalisation.

Keywords: perforation peritonitis, Candida albicans, fluconazole.

INTRODUCTION

Perforation peritonitis is the most common surgical emergency in India. Candida infections of the gastrointestinal tract are rare as its pH is low and the candida colonies are normal commensals of the gastrointestinal tract. Most of the cases of gastric perforation are seen as the complications of peptic ulcer disease, the intake of NSAIDs (Non Steroidal Anti-Inflammatory Drugs), neoplastic diseases, etc (Bakhshi et al., 2011). Most cases of perforitis are caused by Gram-positive cocci, especially Staphylococcus epidermidis and Staphylococcus aureus (Maristela et al., 2007). Gastric perforation which is caused by Candida infections is very rare and it is seen mostly in immunocompromised and debilitated patients (Bakhshi et al., 2011). Here we are reporting a case of perforation peritonitis in a 60 year old male patient after fracture of right lower limb for which he was given analgesics.

CASE REPORT

A sixty year old male presented to the casualty department of Dr. Ram Manohar Lohia Hospital & PGIMER with complaint of pain in abdomen, abdominal distension and unable to pass faeces or flatus since past one day. Patient gives past history of trimalleolar fracture of right lower limb forty five days back for which plaster was applied in private hospital. Patient was on analgesics since forty five days. On admission, his general condition was poor, afebrile, pulse rate was 110/min, blood pressure was 90/60mmHg. On per abdomen examination, abdomen was distended, guarding and rigidity present. Liver and spleen were not palpable. On cardiovascular, respiratory and Central nervous system were within normal limits. X-ray chest PA view of the patient done which showed gas under diaphragm suggestive of perforation peritonitis. An exploratory laparotomy was done immediately and perforation was found in the pre-pyloric region of 1×1cm which was repaired with modified Graham’s patch. Around 2 litres of pus with feculent material was drained. He was
Peritonitis secondary to perforation of gastrointestinal tract with gross contamination is becoming increasingly common. Enteric Gram-negative organisms and anaerobes are the predominant isolates in patients with perforation peritonitis, with *E. coli* and *Bacteroides fragilis*, respectively, being most frequent (Nathens 2001). Fungal pathogens are uncommon isolates in the setting of peritonitis, responsible for 9 to 14% of the cases (Prasad et al., 2004; Manzano-Gayosso et al., 2003). Fungal peritonitis is most commonly caused by *Candida* species. Candida is a ubiquitous fungus, even in the gut of healthy individuals. However, it is rarely pathogenic in the gut. Under normal circumstances, the level of the Candida are controlled by beneficial bacteria. However, if the bacterial-fungal balance is upset by the usage of antibiotics or if the immune system is compromised, an overgrowth of Candida can occur, resulting in an infection (Nalini 2012).

In our patient, there was a long history of intake of analgesics followed by sudden onset of pain and abdominal distension that was recognized as due to perforation of pre-pyloric region, leading to acute peritonitis. The Candida infection is a serious medical condition that requires an immediate medical attention. Undiagnosed gastric candidiasis can be associated with a significant morbidity and mortality.

In our patient, an exploratory laparotomy was done immediately and it revealed a gastric perforation in the pre-pyloric region which was repaired with modified Graham’s patch. However, the patient was not given any antifungal treatment at that time. Later pus drained out from surgical site which was cultured to isolate candida albicans. Then fluconazole was added in the treatment and patient condition improved significantly. This case emphasized the rare fungal aetiology as a cause of the gastric perforation. It is, therefore, recommended that all patients undergoing laparotomy for perforation peritonitis should undergo peritoneal fluid cultures both for bacteria and fungi and should be treated accordingly. Early recognition and treatment of fungal infection can potentially minimize the high mortality seen in these patients.

REFERENCES


