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INVASIVE GASTRIC MUCORMYCOSIS: REPORT OF A CASE AND REVIEW OF THE LITERATURE

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ABSTRACT

Invasive gastric mucormycosis is a rare and fatal disease. We report a rare case with longstanding SLE who presented with fever. Autopsy showed multiple small shallow-based ulcers in the antrum. Histologic examination showed invasive mucormycosis. This is a rare case of invasive gastric mucormycosis localized exclusively in the stomach.

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Keywords: Stomach, mucormycosis, immunocompromised patients, gastric ulceration.

INTRODUCTION

Invasive gastric mucormycosis is a rare and fatal disease, seen only in severely debilitated patients.[1] The disease presents with variable signs and symptoms, such as gastric ulcer,[2] gastritis[3] and gastric perforation.[4] The majority of the reported cases have been fatal[5] except for a few which had received antifungal drugs on an early diagnosis.[6,7]

CASE REPORT

A 63 year old female, a known case of SLE, presented with low grade fever. She had been on prednisolone (10 mg/day) for several years. The only positive finding related to the GI tract was 1+ occult blood in the stool. The patient developed spontaneous bruising and bleeding from venipuncture sites. She became confused and died with cardiorespiratory arrest.

Complete autopsy was performed to investigate the cause of death. On postmortem study there were multiple (~10) small shallow-based circular ulcers in the antrum. Microscopic examination of the mucosal ulcerations revealed numerous mucor hyphae. There was massive tissue and vascular invasion (Fig. 1). Multiple sections of other organs were surprisingly negative for fungal infection.

DISCUSSION

Mucormycosis has been described in most sites of the body.[8] Gastrointestinal variants are rare and most of the previous reports are from Africa.[2] It can be seen in the esophagus, stomach and intestine.[9,10] The stomach can be involved by mucor as colonization, infiltration and invasion.[2] The two former may be seen as isolated gastric involvement in various conditions such as peptic ulcer and even in normal healthy persons.[2] But invasive gastric mucormycosis is rare and fatal, seen only in severely debilitated or immunocompromised patients.[1] The majority of reported cases have been in kidney[5,7,9] and heart[4,6,11] transplants. The other rare cases have been reported in myelodysplastic syndrome,[12] diabetes,[13] AIDS[14] and one report in a young woman, a known case of SLE.[15] There are three reported cases in the pediatric age group,[16] two of which had lymphoma and leukemia and the last one was a premature infant.[16] The patients presented with variable signs and symptoms, i.e., gastric ulcer,[2] severe gastritis,[3]

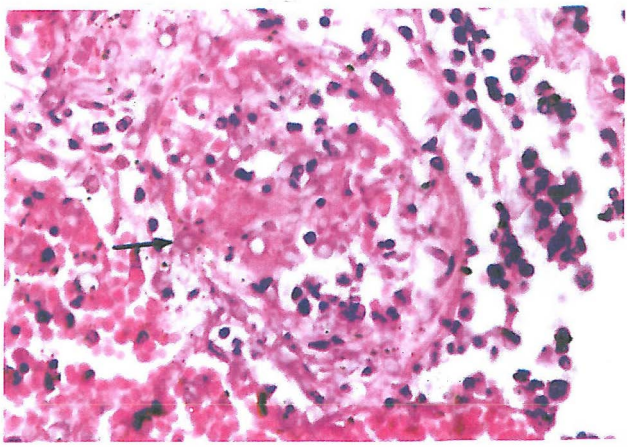


Fig. 1. Microscopic view of vascular invasion of mucor in gastric wall (arrow, H&E, ×400).

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gastric perforation,[4] emphysematous gastritis[3] and acute abdomen.[16] The majority (98%) of the reported cases were fatal[5] except for a few which had received antifungal drugs on an early diagnosis.[6,7]

Our case is rare in the mode of presentation (fever) and we assume that the stomach was the primary route of entry.

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