Descending necrotizing mediastinitis: how a sore throat can result in purulent peritonitis

Darragh John Rice, Naomi Fearon, John Reynolds, Narayanasamy Ravi

Department of Upper Gastrointestinal Surgery, St James Hospital, Dublin, Ireland

Background: Descending necrotizing mediastinitis (DNM) is a rare, life-threatening complication of oropharyngeal infections, involving rapid spread of necrosis via fascial planes into the mediastinum.

Methods: Here we will present a case report that is of interest due to the continued descent of the infection into the peritoneal cavity, requiring a laparotomy to debride and drain the intra-abdominal infection.

Results: A 29-year-old female, with no background medical history, presented with sudden, severe retrosternal and epigastric pain. Three days prior she had commenced oral antibiotics to treat an episode of tonsillitis. She was tachycardic, tachypnoeic, and was tender over the anterior aspect of her neck and her epigastrium. A CT scan showed a large retropharyngeal abscess extending from her oral pharynx caudally throughout her mediastinum and into the peritoneum. She underwent urgent surgical debridement of the retropharyngeal abscess, posterior mediastinum and retromanubrial space via a right cervical incision. A midline laparotomy was then performed to debride the pre-peritoneal necrotic tissue and for drainage of intraperitoneal pus, before the anterior mediastinum was accessed via the oesophageal hiatus and debrided until it connected with the cavity above. The patient recovered in intensive care requiring ongoing drainage, broad spectrum antimicrobial therapy and two further surgical debridements. Following an extensive rehabilitation process she made a good recovery and was discharged, 101 days after her initial presentation.

Conclusions: This case highlights the need for clinical suspicion of DNM in patients presenting with sepsis following a recent oropharyngeal infections. The cornerstone of management is extensive debridement of the tissue necrosis.

Keywords: Debridement; descending necrotizing mediastinitis (DNM); peritonitis

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Footnote

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