Case Report Title:- Danger! Thoracic Aneurysm rupture presents as hematemesis

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Introduction

- Thoracic aneurysms are characterized by the dilation of the aortic wall and are often asymptomatic.
- However, complications can escalate, particularly if certain risk factors are present, such as smoking, hypertension, hypercholesterolemia, and a history of aortic dissections.
- For asymptomatic individuals, the treatment approach typically focuses on symptom management and reduction of cardiovascular risks.
- Despite comprehensive conservative management, open or endovascular surgical repair may be considered as secondary options.
- Both techniques carry potential complications, and in some instances, the risks may outweigh the benefits of surgical intervention.

Discussion

•This case highlights the importance of the dangerous complications that can result from EVAR invasive procedures like the case mentioned below.
•Endovascular repair is now increasingly being used to manage other aortic conditions, including blunt thoracic aortic injury, aortic dissection, and penetrating aortic ulcer.
•This indicates the flexibility and wide-ranging applicability of endovascular techniques in aortic pathology management.
•As underscored by guidelines from leading medical and surgical societies, the decision to employ endovascular repair should be made on a case-by-case basis.
• Considerations should include the patient's age and their risk factors for perioperative morbidity and mortality.

Conclusion

This case highlights the complexities and risks of endovascular stent placements for aortic aneurysms, a procedure used in about 60% of eligible patients. Over time, these stents can erode the arterial wall, potentially leading to fistulous tracts to the esophagus. As stent placement becomes more common, understanding its alarming complications becomes crucial. Notably, women face a 96% higher risk of complications, including endovascular leaks and arterial rupture, and have a significantly higher 30-day mortality rate. This underscores the need for a more nuanced approach to these procedures.

Case Presentation:-

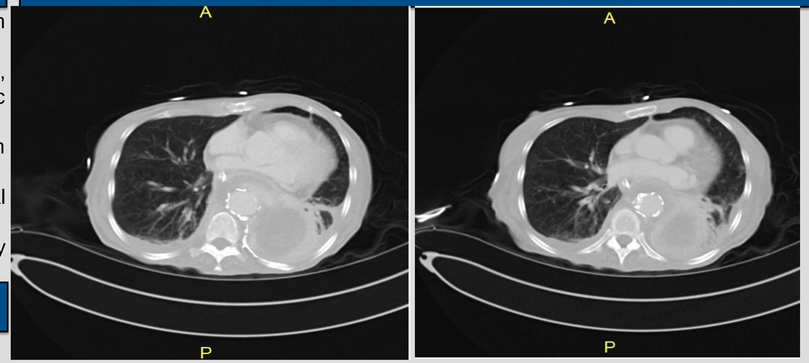
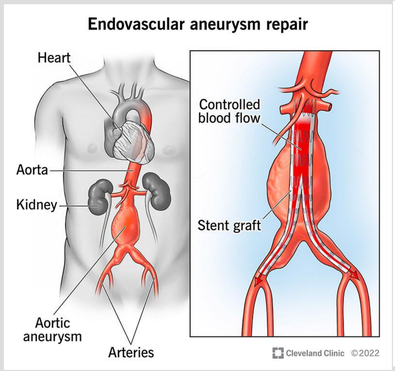
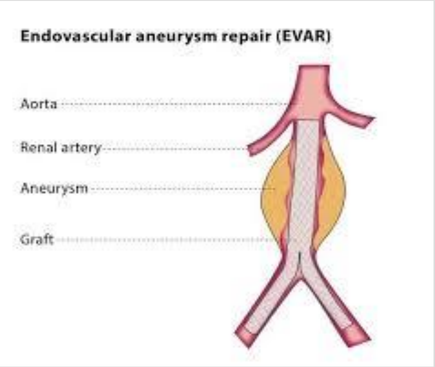


Image A:- Depicts Distal descending thoracic aortic aneurysm status post stent graft showing interval enlargement due to endoleak and rapid enlargement in comparison to prior studies raises concern for impending rupture noting that findings in the left lower chest and possibility of contained mediastinal.rupture.
Image B:- Advancing endovascular leak as depicted





A 67-year-old woman with a multifaceted medical history, including a prior small bowel perforation managed with small bowel resection and right hemicolectomy, thoracic aortic aneurysm handled with an endovascular stent graft, chronic obstructive pulmonary disease (COPD), high blood pressure (HTN), multidrug-resistant organism urinary tract infection (MDRO UTI), a complex cyst/mass in the right adnexal region and severe protein calorie malnutrition. Her hospitalization consisted of complications such as hydronephrosis, which required a percutaneous nephrostomy (PCN) tube placement, an extended-spectrum beta-lactamase (ESBL) E. coli UTI, a bloodstream infection caused by methicillin-resistant Staphylococcus aureus (MRSA), and acute kidney injury (AKI). Due to severe pain, tachycardia, hypotension, and hypoxia, a rapid response was called. Initial examination suggested she was vomiting blood, with bright red blood observed at the back of her throat. She expelled between 100 to 200 cc of blood, which necessitated the infusion of blood products and intravenous fluids. Her history of gastritis and recent MRSA bloodstream infection led to suspicion of gastrointestinal bleeding, but immediate CT Abdominal imaging showed endovascular leak from a thoracic abdominal aneurysm stent which led to massive thoracic abdominal aneurysmal rupture. It is hypothesized that the thoracic endovascular stent eroded into the esophagus, which led to massive hematemesis. Critical care intensivists and the cardiothoracic team were consulted which recommended invasive mechanical ventilation to protect the airway. Despite these interventions, her prognosis remained grim due to the extravasation and rapid hemodynamic instability. After multidisciplinary discussions with family and the respective care team the patient unfortunately passed away.

References:-

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