**Voice of Warning: Subcutaneous Emphysema Following Colonoscopy**

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Introduction

Complications following colonoscopy, including perforation, bleeding, and altered bowel function, are well-documented. Colon perforation with subcutaneous emphysema is a recognized adverse event associated with various risk factors such as advanced age, comorbidities, and endoscopist experience. Treatment decisions hinge on factors like timing of recognition, perforation size, and proceduralist expertise.

Case Description

A 70-year-old Chinese male with a history of colonic diverticulosis and a dysplastic rectal polyp presented to the Emergency Department one day after undergoing colonoscopy and polypectomy, reporting changes in voice, neck swelling, difficulty breathing, and abdominal discomfort. Despite being asymptomatic immediately post-procedure, he developed a high-pitched voice at night and other symptoms later. His vitals were stable, not tachypneic, and his oxygen saturation was 98% under room air. Physical examination revealed extensive subcutaneous emphysema from the abdomen to his neck, with no signs of peritonitis. Erect chest x-ray confirmed air under the diaphragm and extensive subcutaneous emphysema on abdominal, chest, and neck X-rays. Laboratory results indicated elevated lactate, inflammatory markers and leukocytosis. Antibiotic therapy was initiated and treated conservatively. He showed improvement clinically and was discharged well after two days. The one-week follow-up showed the resolution of signs and symptoms.

Discussion

Subcutaneous emphysema can develop after colonoscopy-induced perforation, typically due to extraperitoneal air leakage. It can lead to unusual symptoms such as changes in voice, neck swelling, and difficulty breathing. Studies indicate a higher perforation rate in colonoscopies involving polypectomies. Conservative management, including intravenous fluids, bowel rest, and antibiotics, is appropriate for patients in stable condition without signs of peritonitis, while surgical intervention is for cases with diffuse peritonitis or clinical deterioration despite conservative measures. Voice changes like thickened, high-pitched, or hyponasal voice can signal retropharyngeal air accumulation. It should prompt healthcare providers to consider subcutaneous emphysema post-colonoscopy.

Conclusion

Heightened awareness of voice changes as a potential early sign of subcutaneous emphysema following a colonoscopy can aid in prompt diagnosis of perforated viscus and management, which improves patient outcomes.

Keywords

Colonoscopy, subcutaneous emphysema, voice

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