Short Communication
Volume 09:06, 2024

Clinical Gastroenterology Journal

ISSN: 2952-8518 Open Access

Recent Progress in the Diagnosis and Management of Gastric Arteriovenous Malformations: A Brief Overview

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Introduction

Gastric arteriovenous malformations (AVMs) are uncommon vascular abnormalities that occur in the stomach, characterized by abnormal connections between arteries and veins, resulting in a network of tangled blood vessels. These malformations can lead to symptoms such as gastrointestinal bleeding, iron deficiency anemia, abdominal pain, and, in severe cases, life-threatening hemorrhage. Recent advancements in the diagnosis and treatment of gastric AVMs have focused on improving patient outcomes and minimizing complications. However, this anatomical variation can persist in some adults. Additionally, individuals with the thyroid ima artery may face unique challenges, particularly in the context of hyperthyroidism. For example, patients with Graves' disease, which causes an overactive thyroid, may experience thyroid storm—a severe and potentially fatal complication of hyperthyroidism [1].

Description

Esophagogastroduodenoscopy remains the primary diagnostic modality for gastric AVMs. It allows direct visualization of the abnormal blood vessels, assessment of bleeding severity, and targeted biopsy or therapeutic interventions. This technique involves the application of special dyes during endoscopy to enhance the visualization of abnormal blood vessels and improve diagnostic accuracy. Endoscopic ultrasound can help evaluate the depth of AVM involvement, assess adjacent structures, and guide therapeutic interventions. These imaging modalities can provide detailed vascular mapping and aid in preoperative planning. Endoscopic interventions are the first-line treatment for gastric AVMs, especially in cases of active bleeding or high-risk lesions. Using devices like clips, bands, or electrocautery to achieve hemostasis and control bleeding. Endoscopic sclerotherapy injection of sclerosing agents into the AVM to induce thrombosis and vessel occlusion.

Endoscopic laser therapy can be used to destroy abnormal blood vessels and promote hemostasis. Surgical removal of small AVMs can be performed via endoscopy. Transcatheter arterial embolization minimally invasive procedure involves the injection of embolic agents into the arteries supplying the AVM, causing vessel occlusion and cessation of bleeding. In cases where endoscopic therapies or TAE are unsuccessful or not feasible, surgical resection of the AVM may be necessary. This approach is typically reserved for large, complex, or high-risk lesions. Medical therapy although no specific medical treatment exists for gastric AVMs, certain medications such as proton pump inhibitors and iron supplements may be prescribed to manage associated symptoms and complications [3].

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Received: 02 December, 2024, Manuscript No. cgj-25-157788; **Editor Assigned:** 04 December, 2024, PreQC No. P-157788; **Reviewed:** 17 December, 2024, QC No. Q-157788; **Revised:** 24 December, 2024, Manuscript No. R-157788; **Published:** 31 December, 2024, DOI: 10.37421/2952-8518.2024.9.289

RFA is a newer endoscopic technique that uses thermal energy to ablate abnormal blood vessels. It has shown promise in the treatment of gastric AVMs, particularly smaller lesions. Cryotherapy involves freezing the AVM with liquid nitrogen or argon gas, leading to tissue necrosis and vessel destruction. It is another emerging endoscopic approach for managing gastric AVMs. These advanced endoscopic techniques allow en bloc resection of larger AVMs with better visualization and lower recurrence rates. Blood tests may be conducted to check for anemia or other abnormalities that could indicate gastrointestinal bleeding. Imaging techniques like angiography, computed tomography angiography or magnetic resonance angiography may be employed to visualize the blood vessels in the stomach and identify the presence of AVMs. Upper gastrointestinal endoscopy is a key diagnostic tool for gastric AVMs. It involves the insertion of a flexible tube with a camera (endoscope) into the esophagus and stomach to directly visualize the AVMs and assess their characteristics [4].

The selection of vessels for embolization depends on the individual patient's vascular anatomy and the therapeutic goals. Each case requires careful assessment and consideration of the best approach to achieve the desired outcomes. Consulting with an interventional radiologist or a qualified healthcare professional experienced in thyroid embolization is crucial in making appropriate treatment decisions based on the specific circumstances of the patient. Gastric arteriovenous malformations are abnormal tangles of blood vessels that form in the stomach. These malformations can lead to various symptoms such as gastrointestinal bleeding, iron deficiency anemia, and abdominal pain. Diagnosis and treatment of gastric AVMs typically involve a combination of imaging studies, endoscopy, medical history and physical examination. The doctor will begin by taking a detailed medical history and performing a physical examination to assess the patient's symptoms and overall health [5].

Conclusion

These advancements in diagnosis and treatment have expanded the therapeutic options available for gastric AVMs. They offer less invasive approaches, improved success rates in achieving hemostasis, and reduced morbidity and mortality associated with these challenging vascular lesions. However, the choice of treatment depends on factors such as the size and location of the AVM, severity of bleeding, and patient characteristics, and should be tailored to individual cases.

Acknowledgement

None.

Conflict of Interest

None.

References

1. Rajati, Fatemeh, Nassim Ahmadi, Zahra Al-sadat Naghibzadeh and Mohsen Kazeminia. "The global prevalence of oropharyngeal dysphagia

in different populations: A systematic review and meta-analysis." *J Transl Med* 20 (2022): 175.

2. Todd, Vi, Guido Van Rosendaal, Kelly Duregon and Marja Verhoef. "Percutaneous endoscopic gastrostomy (PEG): The role and perspective of nurses." *J Clin Nurs* 14 (2005): 187-194.
3. Madigan, Sharon M., Paul Fleming, Siobhan McCann and Marion E. Wright, et al. "General Practitioners involvement in enteral tube feeding at home: A qualitative study." *BMC Fam* 8(2007): 1-7.
4. Pih, Gyu Young, Hee Kyong Na, Suk-Kyung Hong and Ji Yong Ahn, et al. "Clinical outcomes of percutaneous endoscopic gastrostomy in the surgical intensive care unit." *Clin Endosc* 53 (2020): 705-712
5. Yeh, Lily, Li-Hua Lo, Susan Fetzer and Ching-Huey Chen. "Limited PEG tube use: The experience of long-term care directions." *J Clin Nurs* 19 (2010): 2897-2906.

How to cite this article: Hary, Yados. "Recent Progress in the Diagnosis and Management of Gastric Arteriovenous Malformations: A Brief Overview." *Clin Gastroenterol J* 9 (2024): 289.