



A NOVEL PROCEDURE FOR RECURRENT GASTRO CUTANEOUS FISTULAS: ENHANCING THE OVER THE SCOPE CLIP

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Abstract

Despite a wide array of standardized treatment modalities for gastrocutaneous fistulas (GCF), there is a large rate of recurrence following repair. While the applications of over the scope clips have shown promising results, its use is limited by the luminal size of the fistula. Therefore, in this report we present an innovative technique utilizing submucosal injections of histoacryl glue to successfully facilitate and stabilize over the scope clips.

Case History

- A female in her 40's presents with abdominal pain and recurrence of GCFs
- She holds a significant history of a hiatal hernia, Nissen fundoplication, methamphetamine abuse, treatment for a perforated viscus and gastrostomy tube placement.
- Standardized treatments of the fistula including surgical excision and esophageal duodenoscopy (EGD) guided fistula closures were originally performed

Novel Technique

- A gastroduodenoscopy helped visualize the gastric fundal region where a >10mm fistula was located.
- A histoacryl glue solution (1mL saline and 0.5mL histoacryl) was then injected into the submucosal space surrounding the fistula, approximating the luminal surface.
- A pad lock over the scope clip was then advanced to the site where suction helped further approximate the tissue.
- Application of the clip cleared any notable air leaks demonstrating adequate closure of the fistula.
- The same technique was utilized for the second >10mm fistula in the gastric antrum with adequate closure.

Discussion

- Compared to fibrin glue, histoacryl is not a protein and may therefore resist enzymatic degradation from gastric secretions and fistula effluents. Histoacryl also carries no risk of transmitting infection or inducing allergic reactions compared to fibrin glue's bovine protein component making it a favorable candidate for GCF treatment
- This technique allows for better approximation of the luminal walls of the fistula, promoting a proper closure with an over the scope clip. Reviews have set a desirable cut-off point to roughly <10mm. The successful closure of two recurrent fistulas measuring >10mm in our patient suggests that our novel technique may redesign current limitations with applying over the scope clips in fistula closures.

CONCLUSION

- The approximation of the luminal walls of fistulas measuring >10mm with histoacryl glue prior to over the scope clip application is an innovative technique that may reinvent current standards. The successful treatment of two recurrent GCFs in our patient measuring >10mm outlines the reliability and efficacy of this technique.

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