INITIAL PERFORMANCE AND PROCEDURE PREFERENCE FOR SINGLE-USE THERAPEUTIC GASTROSCOPES

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INTRODUCTION

Across endoscopy, single-use endoscopes have demonstrated numerous benefits for healthcare facilities, physicians, and patients such as eliminating costly repairs, reducing endoscope-related infections and readmissions, and increasing ease of access for emergent cases. With the release of the first single-use therapeutic gastroscope (SUTG) (4.2mm working channel) in June 2024, understanding its potential impact on care is critical. This survey aimed to assess the potential benefits of SUTGs in addressing specific procedures and patient populations.

METHODS

- 10 gastroenterologists completed 32 procedures with the Ambu aScope Gastro Large.
- After the completion of each procedure, physicians were asked to complete a survey that included questions related to Single-use Therapeutic gastroscope availability, preference, and potential use.
- Data was collected from April to June 2024.

RESULTS

- **94% (29/31) of procedures performed with the novel single-use therapeutic gastroscope were successful.** Of the physicians that cited delays due to availability issues:
  - One case was unable to be completed due to issues with insufflator connection.
  - One case could not be completed due to patient complications that could not be remedied by either the Gastro Large or a reusable gastroscope.
  - One case was excluded since the SUTG was used to reach a bleed in the distal duodenum, a location not regularly addressed with therapeutic gastroscopes due to length limitations.
- **80% of physicians** stated that they would prefer **SUTGs over reusables for acute upper GI bleeds.**
- **70% of physicians** stated that they would prefer **SUTGs over reusables for emergent procedures after hours.**

Table 1. Physician preference toward the Ambu single-use therapeutic gastroscope by procedure

Procedure	Percentage Single-Use Therapeutic Gastroscope Preferred
Acute upper GI bleed for better suction	80%
Emergent procedure after hours	70%
Direct endoscopic necrosectomy	50%
Foreign body removal/food impaction	50%
Immunocompromised patients	50%
Out-of-suite interventions in the ICU or OR	50%
Through the scope metal stent placement	40%
Patients with known MDROs	30%

DISCUSSION

- **The Ambu aScope Gastro Large may be ideal for treating certain conditions like acute upper GI bleeds** as suggested by the physician preference due to the scope's superior suction compared to reusable therapeutic gastroscopes.
- The single-use nature of Gastro Large may provide added patient safety when treating immunocompromised patients or those with known MDROs due to the guaranteed sterility of the endoscope from the package.
- SUTGs are ideal for addressing emergent procedures after hours since they can be stored in multiple locations throughout a healthcare facility and eliminate the need for on-call reprocessing.

CONCLUSION

Procedures were successful using the SUTG in 94% of cases. Post-procedural surveys highlight how the SUTG may impact a healthcare providers' ability to quickly and confidently address certain procedures and patients such as acute upper GI bleeds, after-hour cases, out-of-suite interventions, foreign body removals, and immunocompromised patients. Further research should be completed to better understand the impact that SUTGs may have on clinical outcomes.