

An External Channel for Endoscopy

Summary

During endoscopy, a procedure using an endoscope to look inside the gastrointestinal tract, a surgeon may encounter blockages such as blood clots or partially digested food. Limitations of standard endoscope internal channel sizes may prevent these obstacles from being suctioned. This invention, which is easy to use, quick to setup, inexpensive to manufacture, and disposable, is designed to enhance suctioning capabilities to prevent intraoperative clogging. Further use may include the ability for rapid insertion of contents into the stomach or colon as necessary in various surgical procedures.

Key Investigator

Melvin Lau, MD

Field

Gastroenterology

Technology

Surgical apparatuses for coupling elongated members to endoscopes, and related methods

Key Features

- Disposable
- Reduced Risk for intraoperative clogging
- Improved ability for rapid insertion of contents into colon or stomach
- Simple and cost effective to develop and incorporate

Stage of Development

Preclinical, prototype

Status

Available for licensing

Patent Status

Patent applications
WO 2015026956
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Market

An endoscopy is a nonsurgical procedure that allows a physician to gain visualization of various anatomic structures, most often the digestive tract. Endoscopies are performed for various reasons, including the examination or treatment of abnormal growths, bleeding, ulcers, pain, or to perform a biopsy.

The demand for endoscopic procedures continues to increase due in part to informed patients and an aging population. Reports indicate approximately 9.2 million outpatient and 1.2 million inpatient intestinal endoscopies are performed annually in the U.S. alone. The global endoscopy market is projected to reach \$9.7 billion by 2016—an increase of \$3.6 billion from 2011. The largest growth rate is expected for endoscopic accessories.

Current endoscopes have limited suction and insertion capabilities due to narrow channel sizes which can result in intraoperative clogging. The present invention, however, addresses this issue with a cost effective, easy-to-use disposable channel accessory.

Technology

This technology pertains to a disposable apparatus that is configured to facilitate the suctioning of large contents from the digestive tract, or the insertion of contents into the digestive tract, when coupled to the tip of an endoscope. Once coupled, the device may improve the efficacy and rate at which contents can be removed from or introduced to a patient. This technology may address the challenges associated with existing endoscope internal channel sizes, such as intraoperative clogging due to obstacles such as a clot or partially digested food.

The device prototype is being developed.



One Embodiment of Surgical Apparatus