# Diagnostic esophagogastroduodenoscopy performed using a novel sterile single-use disposable endoscope







▶ Video 1 Diagnostic esophagogastroduodenoscopy performed using the aScope Gastro. Use of the gastroscope is demonstrated. Biopsies are taken from the duodenum and antrum ventriculi. A hiatal hernia is visualized when looping in the stomach.

Growth of biofilm in the channels of endoscopes is common [1]. Damage to the channels, followed by formation of biofilm, may occur during both endoscopic procedures and the cleaning process. Biofilm is difficult to remove, and microbial contamination increases with the age of the endoscope [2]. The quality of reprocessing of endoscopes is believed to be associated with the contamination rate [3]. These aspects are not relevant for single-use endoscopes.

A 60-year-old woman with osteoporosis was referred for a diagnostic esophago-gastroduodenoscopy (EGD) due to iron deficiency anemia. The patient had no gastrointestinal symptoms or symptoms of anemia. A colonoscopy with normal findings had been performed prior to referral. EGD was performed using a novel sterile single-use endoscope (Ambu aScope Gastro; Ambu, Ballerup, Denmark). The procedure was performed in our endoscopy unit by a junior medical doctor (**Video 1**). The endoscope was

unpacked in the endoscopy room (▶ Fig. 1, ▶ Fig. 2) and connected to the aBox (▶ Fig. 3.) The patient was given a local anesthetic throat spray prior to intubation. No sedation was needed. Except for a hiatal hernia, there were no abnormal findings in the duodenum, stomach, or esophagus. Duodenal and qastric antral biopsies were taken.

The EGD was performed uneventfully and using the endoscope was feasible in terms of image quality and maneuverability. The complete single-use endoscope setup is more portable than the conventional setup because the aBox replaces existing endoscopic platforms. This enables the endoscopist to perform some procedures without moving the patient to the endoscopy unit or the operating room. Furthermore, there is no need for cleaning and repairs, which saves additional resources [4].

Our case demonstrates a successful diagnostic EGD using the novel single-use disposable gastroscope (**Fig.4**). Sin-



► **Fig. 1** The aScope Gastro before unpacking.



► **Fig. 2** The aScope Gastro after unpacking.

gle-use endoscopes should be considered as an alternative when time and availability are essential.

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► **Fig. 3** The aBox 2 unit with the singleuse gastroscope connected to it.

► Fig. 4 A diagnostic esophagogastroduodenoscopy performed using the aScope Gastro.

### Competing interests

The authors declare that they have no conflict of interest.

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