

SINGLE-USE GASTROSCOPE REDUCES ENDOSCOPIST MUSCLE LOAD COMPARED TO REUSABLE GASTROSCOPE

Sven Adamsen

UEG Week Copenhagen 2023

Poster

October 15, 2023

A controlled study in 14 subjects found that holding and operating a single-use gastroscop (0.6 kg) resulted in statistically lower wrist muscle activation compared to a heavier reusable gastroscop (1.4 kg), both at rest and during standardized maneuvers.

KEY POINTS

- Wearable electromyogram sensors measured left wrist flexor and extensor muscle load while subjects held and operated an aScope Gastro single-use gastroscop (0.6 kg) and an Olympus GIF-1TH190 reusable gastroscop (1.4 kg) through standardized exercises.
- Muscle load was significantly higher with the reusable gastroscop during all tasks: flexors 6 ± 2 versus 5 ± 2 percent maximal voluntary contraction, extensors 7 ± 3 versus 6 ± 3 percent (all $p<0.001$).
- Even during static rest positions requiring no wheel or valve manipulation, the reusable gastroscop produced higher muscle activation in both flexors (4 ± 2 versus 3 ± 2 percent) and extensors (3 ± 1 versus 2 ± 1 percent, all $p<0.001$).
- The authors conclude that the lighter single-use gastroscop reduces load on left wrist muscles and may benefit user ergonomics, potentially preventing or delaying tremor, fatigue, and musculoskeletal injuries; both authors disclose employment or advisory relationships with Ambu.

VIEW THIS CONTENT ON GUTFLIX

<https://gutflif.eu/search/d/8dd9ef86-743b-11ee-a57a-0242ac140004>



AI-generated summary

This summary was generated by an AI large language model based on the content transcript. It is for informational purposes only and should not be considered a substitute for clinical judgment. Always rely on your professional expertise and the full clinical context when making clinical decisions.