

# GASTROINTESTINAL ENDOSCOPY AND MUSCULOSKELETAL INJURIES



Studies have reported a prevalence of musculoskeletal pain and injuries among GI endoscopists<sup>1</sup>.

## Intensive muscular demand takes its toll on endoscopists

The high incidence of injury has been correlated with the intensive muscular demand required during a procedure<sup>1</sup>.

In GI endoscopy procedures, such as ERCP, colonoscopy and EGD, contributing factors include<sup>2</sup>:

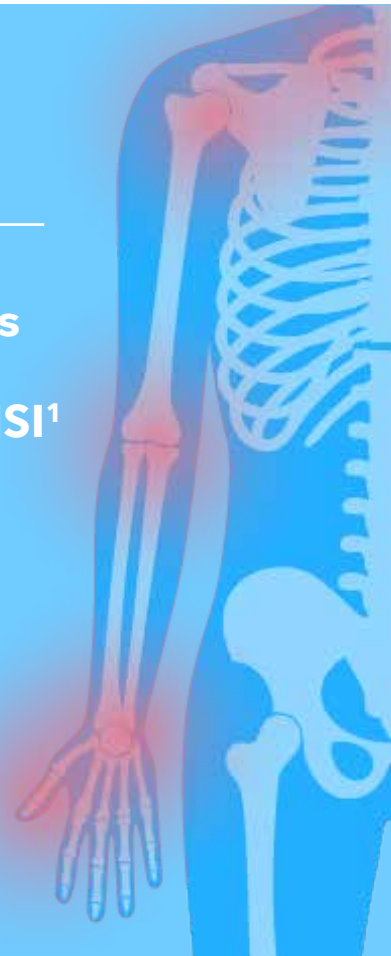
- Repetitive hand and digit movement
- Prolonged awkward postures
- Continuous application of forces and torques
- Contact stress
- Vibration

## Occupational hazards related to endoscope ergonomics

Although many advancements have been made in the technology and design of endoscopes over the last five decades, the same cannot be said for their ergonomic design. This may have consequences in the form of musculoskeletal injuries (MSI), which can affect productivity and even shorten the career of a GI endoscopist.

## Musculoskeletal injuries

**Up to 89% of GI endoscopists suffer from work-related MSI<sup>1</sup>**



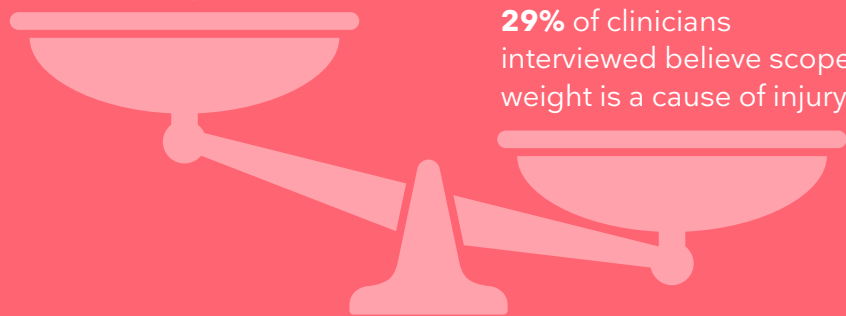
## Experts recommend lighter endoscopes when possible

Musculoskeletal injuries are significantly associated with endoscopy procedure volume, and, currently, endoscopies typically account for more than 40% of the total duties of GI endoscopists<sup>3</sup>.

Furthermore, heavier endoscopes may be associated with increased rates of overuse injury, resulting in increased static load, which decreases the muscle perfusion and accumulation of lactic acid and can lead to muscle fatigue and pain<sup>2</sup>.

## The #1 feature of endoscope ergonomics that GI doctors would like to change is the weight

Ambu® aScope™ Duodeno is the lightest duodenoscope currently available, weighing **54% less than a typical reusable scope**



**29%** of clinicians interviewed believe scope weight is a cause of injury

Data available upon request.



**“The combination of long, repetitive worktimes with intensive muscular demand has led experts to recommend that, whenever possible, lighter endoscopes should be favored<sup>2</sup>.**

### aScope Duodeno: designed for control and comfort

aScope Duodeno is a single-use duodenoscope, which is ergonomically engineered for control and comfort during ERCP procedures. Because it is single-use, it gives you a new scope with consistent performance every time, and there's no risk of patient cross-contamination. What's more, there's no need for costly reprocessing or repair.

For more information, please visit [ambu.co.uk/endoscopy/gastroenterology](https://ambu.co.uk/endoscopy/gastroenterology)

<sup>1</sup>Khaniceh and Shergill, Elsevier, <https://doi.org/10.1016/j.tgie.2019.05.003>

<sup>2</sup>ASGE Report, <https://doi.org/10.1016/j.gie.2010.01.071>

<sup>3</sup>Ridetid, GIE, <http://dx.doi.org/10.1016/j.gie.2014.06.036>

**Ambu**