

CLINICAL SUMMARY

Tissue variability in the human stomach

Stomach tissue thickness was measured for 50 patients undergoing vertical sleeve gastrectomy.1

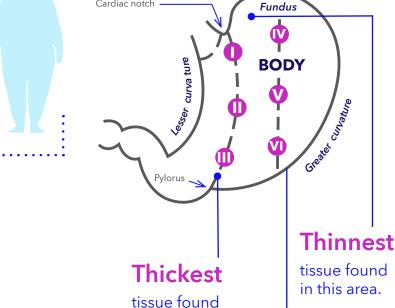
Who participated in the study?

Cardiac notch

Where was the stomach measured?







41,8 years mean age (range 18-62 years)

mean weight prior to surgery (range of 97,5-262,6 kg)

in this area.

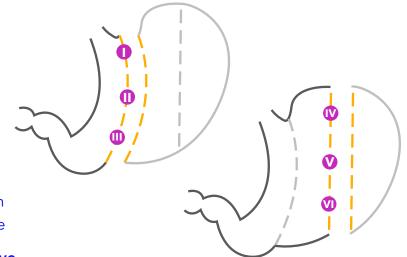
What were the key findings?



thicknesses measured in 6 predetermined tissue zones.

Highly variable

- **//** An important design goal for laparoscopic stapler manufacturers is to improve the performance of the devices for an increased range of tissue thickness."
- Surgical staplers must accomodate tissue variability in two key areas: 1. Within a single staple cartridge application
 - 2. Across the length of the entire stapling line
- Gender and location were determined to have a statistically significant influence on stomach tissue thickness.

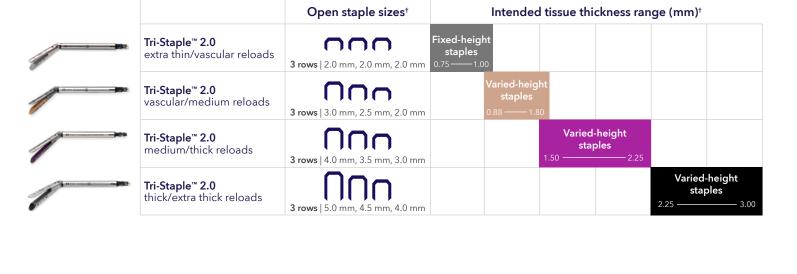


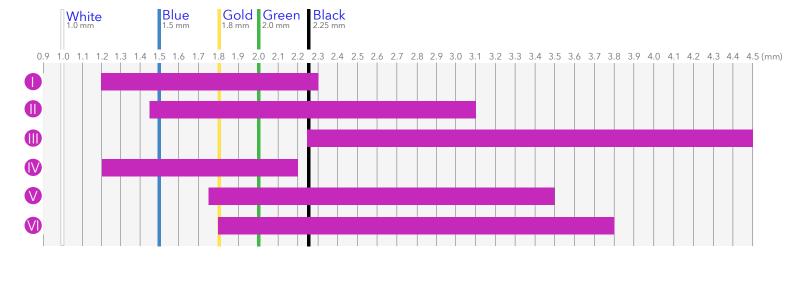


Stapler implications based on the conclusions in the paper

Medtronic reloads with Tri-Staple™ technology

Only Medtronic reloads with Tri-Staple™ technology can deliver an increased range of compressed tissue thickness with its unique graduated tissue compression design.





 $[\]dagger$ Open staple sizes and approximate tissue thickness ranges are based on the respective instructions for use (IFU) for each stapler as of January 2023. Staple height choice should be determined at the surgeon's discretion based on tissue thickness. Please refer to the IFU for the complete list of indications, warnings, precautions, and other

important medical information. 1. Elariny H, et al. Tissue Thickness of Human Stomach Measured on Excised Gastric Specimens from Obese Patients. Surgical Technology International. 2005, 1-4;119-124.

^{© 2025} Medtronic. All rights reserved. Medtronic, Medtronic logo and Further, Together are trademarks of Medtronic. TM* Third party brands are trademarks of their respective owners. All other brands are trademarks of a Medtronic company.