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Robots offer key advantages in esophageal surgery

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Based on what is believed to be the largest study of its kind, Allina Health researchers say robotic assisted transhiatal esophagectomy (RATE) is effective and safe for a carefully selected group of patients.

Robotic technology gives surgeons a better view during surgery and lymph nodes can be removed without additional incisions on the patient.

"Very few centers have adopted robots for this procedure because of the technical difficulties and unique skills that are needed by the surgeons and the operating room staff," says Daniel Dunn, M.D., a retired Allina surgeon and the study's principle investigator. "But the robotic arms can turn and twist and reach more places than human hands will ever be able to."

The study appears in the current issue of the journal of the International Society for Diseases of the Esophagus, *Diseases of the Esophagus*.

The study is based on 100 patients, most of whom had cancer, at Virginia Piper Cancer Institute—Abbott Northwestern. Clinical and safety information was interpreted by the Allina research team and survival data was analyzed by a collaborator at Masonic Cancer Center at the University of Minnesota.

More information: D. H. Dunn et al, Operative and survival outcomes in a series of 100 consecutive cases of robot-assisted transhiatal esophagectomies, *Diseases of the Esophagus* (2017). DOI:

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