Researchers identify the standard for gallbladder cancer surgery

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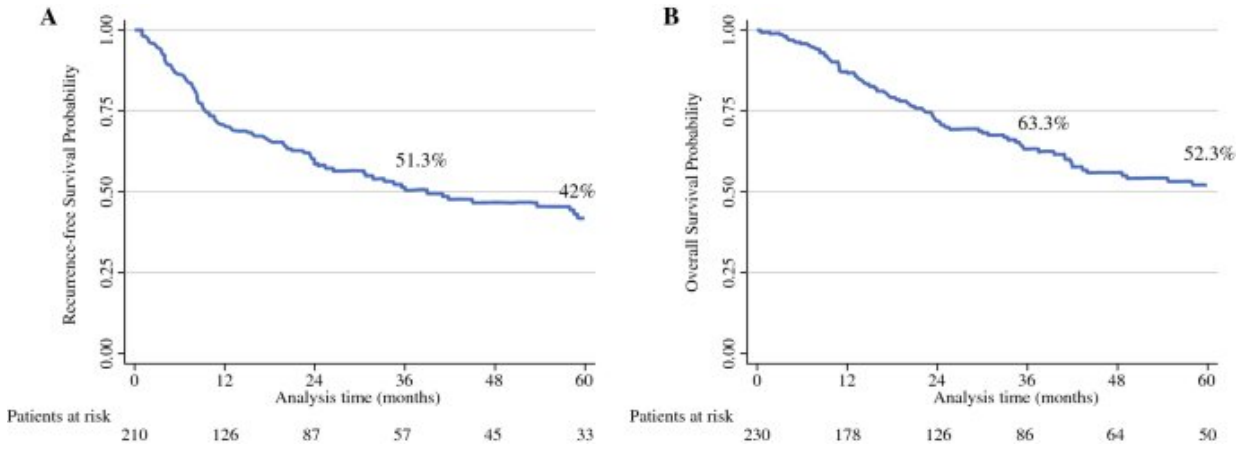

Credit: *Annals of Surgical Oncology* (2023). DOI: 10.1245/s10434-023-13531-2

The quality of surgery can drastically influence both short- and long-term postoperative outcomes and is a crucial consideration in studies that assess surgical outcomes. One approach for developing accurate quality measures is benchmarking, a quality-improvement process in which the best possible outcomes are identified to serve as a point of reference against which performance can be compared.

Surgery for gallbladder cancer (GBC) is a technically challenging surgical procedure and requires considerable expertise to meet high-quality operative standards. While a recent study showed that the quality

of GBC surgery in the U.S. differs by insurance status, income, geographic location, education level and other characteristics, low-quality surgery remains common, indicating the need for specific benchmarks.

For the first time, researchers from Boston University Chobanian & Avedisian School of Medicine and the University of Texas MD Anderson Cancer Center have established a benchmark for GBC surgery that may be useful in identifying the best treatment hospital for patients with gallbladder cancer and improve the overall quality of care.

"Defining benchmark values for GBC surgery will create a reference that institutions can use to assess their surgical performance, improve surgical outcomes and help move centers that currently perform lower-quality GBC surgery toward performing higher-quality surgery," explains corresponding author Eduardo Vega, MD, assistant professor of surgery at the School.

The researchers examined more than 900 patients with GBC who had surgery between 2000 and 2021. These patients were treated at 13 different hospitals across seven countries and four continents. The researchers then selected a group of 245 patients who are low risk patients and had standardized GBC surgery at hospitals with established centers of excellence, specialized programs with exceptionally high concentrations of expertise and related resources. This group was used as a standard for comparison.

The benchmark group was then used to define the best practices related surgical outcomes (benchmark values), as the length of surgery, rate of morbidity, severe morbidity, blood loss, transfusion, positive margin, and number of lymph node retrieved. Then the benchmark group was compared to those of the non-benchmark group, revealing that the benchmark group had a significantly better overall survival rate.

"The benchmark values for GBC surgery can serve as key references for quality improvement efforts and for future comparisons between GBC patients, GBC surgical approaches and centers performing GBC surgery. In particular, the availability of these benchmarks can guide surgical teams to strive for optimal outcomes in GBC surgery, benefiting their patients and better contextualizing GBC resection as a complex surgery that requires centers to be better equipped to provide optimal treatment and management for patients with gallbladder cancer. The results of this study support the idea that centralization of care for gallbladder cancer may lead to better outcomes for patients," added Vega.

According to the researchers, the benchmark values they found will allow surgeons and institutions to define best possible outcomes for GBC patients and enable comparisons with other GBC patient groups, increasing the quality of research collaboration. "The use of a benchmark (best candidate for surgery) group of patients is an important factor that can help healthcare providers and patients make more informed decisions about treatment options and potential outcomes," said Vega.

These findings appear online in the journal *Annals of Surgical Oncology.*

More information: Eduardo A. Vega et al, Benchmarks and Geographic Differences in Gallbladder Cancer Surgery: An International Multicenter Study, *Annals of Surgical Oncology* (2023). DOI: 10.1245/s10434-023-13531-2

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