MedicalXpress

Deaths rise with shift from in-hospital to outpatient procedures for urology surgeries

August 19 2014

As hospitals have shifted an array of common urological surgeries from inpatient procedures to outpatient, potentially preventable deaths have increased following complications.

Those were the primary findings of a new study led by Henry Ford Hospital researchers, who initially expected that improved mortality rates recently documented for surgery overall would also translate to commonly performed urologic surgeries.

The opposite turned out to be true.

The research paper has been published online by *BJUI*, the official journal of the British Association of Urological Surgeons.

The study – which included researchers at Harvard Medical School, the University of Montreal Health Center, Yale University's Department of Urology and the Harvard School of Public Health – also identified older, sicker, minority patients and those with public insurance as more likely to die after a potentially recognizable or preventable complication.

"These high-risk patients are ideal targets for new health care initiatives aimed at improving process and results," says Jesse D. Sammon, D.O., a researcher at Henry Ford's Vattikuti Urology Institute and lead author of the study.

"Urologic surgeons and support staff need a heightened awareness of the

early signs of complications to prevent such deaths, particularly as our patient population becomes older and has more chronic medical conditions."

The study focused on a measure of hospital quality and safety called Failure to Rescue, or FTR, derived from the Institute of Medicine's landmark 1999 report To Err is Human, which highlighted significant concerns for patient safety in American hospitals.

"Failure to rescue describes the inability of a provider or institution to recognize key complications and intervene before mortality," Dr. Sammon explains. "While comparison of overall complications and mortality rates penalizes hospitals treating sicker patients and more complex cases, FTR rates may be a more accurate way to assess safety and quality of care."

Using the Nationwide Inpatient Sample, the largest all-payer inpatient health care database in the U.S., the researchers identified all patients discharged after urologic surgery between 1998 and 2010.

This pool of more than 7.7 million surgeries was analyzed for overall and FTR mortality as well as changes in mortality rates. The researchers determined that while both admissions for urologic surgery and overall mortality decreased slightly, deaths attributable to FTR increased 5 percent every year during the study period.

The researchers also identified each patient's age, race and insurance status, including private insurance, Medicare, Medicaid and self-pay. In addition, the severity of each patient's illness was determined based on co-morbidity, or the presence of other chronic diseases or conditions at the time of their urologic procedure.

They found that the number of inpatient urologic surgeries dropped

during the study period and surmised this was due to a "major shift" to outpatient procedures.

In addition, older, sicker and minority patients, as well as those with public insurance, were more likely to die after a potentially recognizable or preventable complication of their urologic surgery.

Besides the study's primary conclusions, Dr. Sammon says the research also suggested that compared to other medical specialties, "these findings also raise the possibility that the care of urologic surgical patients is suffering from inadequate or poorly applied patient safety measures."

"It's worrisome," he continues, "that the odds of FTR-related deaths have risen over time for the most common types of urologic surgeries including ureteral stenting, treatment of enlarged prostate, bladder biopsies, removal of a diseased kidney and others."

More information: "Preventable Mortality Following Common Urologic Surgery: Failing to Rescue?" Jesse D. Sammon, Daniel Pucheril, Firas Abdollah, Briony Varda, Akshay Sood, Naeem Bhojani, Steven L. Chang, Simon P. Kim, Nedim Ruhotina, Marianne Schmid, Maxine Sun, Adam S. Kibel, Mani Menon, Marcus E. Semel, and Quoc-Dien Trinh. *BJU International*; Published Online: August 19, 2014. DOI: 10.1111/bju.12833

Provided by Henry Ford Health System