

# Claims data reveals patients at post-op infection risk

July 13 2012

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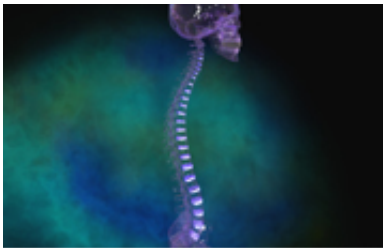


Image courtesy of Blausen Medical

Claims data can be used to accurately identify rates and risk factors for surgical site infection following spinal surgery, according to a study published in the July 1 issue of *Spine*.

(HealthDay) -- Claims data can be used to accurately identify rates and risk factors for surgical site infection (SSI) following spinal surgery, according to a study published in the July 1 issue of *Spine*.

Amir Abdul-Jabbar, from University of California in San Francisco, and colleagues investigated the accuracy of an automated approach to administrative claims data to evaluate the rate and risk factors for SSI in spinal surgeries performed from July 2005 to December 2010. Surgeries were identified using diagnosis-related group, current procedural terminology, and validated *International Classification of Diseases, Ninth Revision* codes.

Of the 6,628 hospital visits identified the researchers found that the cumulative incidence of SSI was 2.9 percent. The rates of infection were significantly increased by procedural risk factors, including sacral involvement (9.6 percent); fusions greater than seven levels (7.8 percent); fusions greater than 12 levels (10.4 percent); cases with an osteotomy (6.5 percent); operations lasting longer than five hours (5.1 percent); and transfusions of [red blood cells](#) (5.0 percent), serum (7.4 percent), and autologous blood (4.1 percent). Additionally, patient-based risk factors that increased the infection rate included anemia (4.3 percent), [diabetes mellitus](#) (4.2 percent), [coronary artery disease](#) (4.7 percent), diagnosis of coagulopathy (7.8 percent), and bone or connective tissue neoplasm (5.0 percent).

"Using an algorithm combining all three coding systems to generate both inclusion and exclusion criteria, we were able to analyze a specific population of [spinal surgery](#) patients within a high-volume medical center," the authors write. "Within that group, risk factors found to increase infection rates were isolated and can serve to focus hospital-wide efforts to decrease surgery-related morbidity and improve [patient outcomes](#)."

**More information:** [Abstract](#)  
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Citation: Claims data reveals patients at post-op infection risk (2012, July 13) retrieved 19 April 2024 from <https://medicalxpress.com/news/2012-07-reveals-patients-post-op-infection.html>

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