Risk Factors associated with infection after low back fusion surgery *

A recent study published in the peer reviewed Journal of Bone and Joint Surgery examined the risk factors associated with fusion surgery on the low back. The study reviewed over 3,000 medical records from patients who had low back fusion surgery using metal instrumentation. The overall infection rate was 2.61%.

The study also looked at patient related factors that could influence the outcome of the surgery, including:

- Advanced age
- Gender
- Obesity
- Elevated cholesterol
- Coronary artery disease
- Chronic lung disease
- Sleep apnea
- Heart failure
- Diabetes
- High blood pressure
- Rheumatoid arthritis
- Osteoporosis

Procedure related factors also play a significant role in surgical outcomes. These factors include the number of people in the operating room, the number of nurses in the room, how long the procedure lasts, the amount of blood loss or transfusion, time spent in the recovery room, and the hospital where the surgery takes place are all risk factors for developing an infection.

Dural tears (a tear of the lining of the spinal tube), can also be a risk factor, and staphylococcus aureus was the most common bacteria risk factor.

The study concluded that patients with obesity, diabetes, chronic lung disease, coronary heart disease, and osteoporosis are at a higher risk for wound infections after low back fusion surgery. It is also important for patients to ask their surgeon for information about the quality and safety of the operating room and any procedure related risks at the specific hospital where the surgery is planned.