

Posterior Lumbar Decompression and Interbody Fusion with Instrumentation

University Neurosurgery Information Sheet

General Indications for the Procedure:

This procedure is used to treat single or multiple levels of symptomatic degenerative disc disease and/or slippage of the bones of the spine.

Description of the Procedure:

This operation is performed by making a one or more incision(s) in the lower back. The muscles are carefully moved and the symptomatic area(s) are exposed. Intraoperative x-ray is used to localize the proper level(s). If necessary the nerves in the region are decompressed. The disc at each symptomatic level is removed and either cadaver bone or a polymer spacer is placed in the region once occupied by the disk(s). The spacer is filled with bone, a chemical that makes bone grow, or both. Screws are placed into the bones above and below each graft. Occasionally more bone graft is placed on the side of the spine.

Risks of Procedure:

The risks and possible complications of this procedure are quite rare. They include, but are not limited to infection, bleeding, and injury to the nerve root(s) which could result in permanent paralysis and/or numbness in the leg. There is a slight chance that spinal fluid may leak from the tissue surrounding the spinal cord, which can usually be successfully stopped with stitches. Infrequently such leakage may require additional surgery to control. The removal of bone and ligament may infrequently result in spinal instability which would require a fusion to be performed with a second surgery. Occasionally the bone grafts do not heal solidly and if this becomes symptomatic further surgery may be necessary. There is no guarantee that this operation will alleviate the symptoms.

Procedure Alternatives, if any:

A decompression without fusion may be performed, but it does not treat instability and may not adequately decrease back pain. Fusion without decompression may be performed but this operation will not always result in optimal nerve decompression. An anterior or lateral fusion or disc replacement may be an alternative in selected patients. The surgeon can describe the advantages and disadvantages of each of these alternatives.

Probable Consequences of Refusing the Procedure:

Symptoms will persist and/or worsen.

Person(s) Performing the Procedure:

The surgical team for this procedure is large. This involves, but is not limited to, the attending surgeons, resident surgeons, surgical nurses, physician assistants, surgical technologists and anesthesiologists. Everyone involved will be performing important tasks related to the surgery in accordance with the hospital policies, and based on their skill set and under the supervision of the responsible practitioners.