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Anterior lumbar interbody fusion (ALIF)

Anterior lumbar interbody fusion is a procedure where the lumbar spine is fused from the front of the spine, ie through the abdomen. During the procedure, the abdominal contents and/or major blood vessels in the abdomen are retracted to gain access to the front of the spine. Disc material is then removed, and a cage placed with bone graft and held in place by screws or a plate.

The procedure is performed for painful disc degeneration, foraminal narrowing where disc height needs to be increased and is also used for spondylolisthesis and scoliosis, but this tends to be combined with a posterior procedure also.

Before anterior lumbar interbody fusion: you will be seen at the pre-assessment clinic where you will be further assessed, and the operation discussed. You will sign a consent form for the surgery and the risks and benefits discussed. You will be given information to take home with you in respect of the consent with regards to risks and benefits and British Spine Registry information.

If you are taking any anti-inflammatories or blood thinning medication, then this needs to be voiced in order for those to be stopped appropriately before surgery.

What to expect during anterior lumbar interbody fusion: an incision is made in the anterior abdomen. Normally this is horizontal but occasionally a vertical incision is required. Once the incision is made then the abdominal contents are moved in order to gain access to the front of the spine. The major artery and vein, ie the inferior vena cava and aorta sometimes need to be manipulated to gain access to the disc. X-ray is used to confirm the appropriate level. The disc is then removed, and a cage inserted with bone graft and is normally held in place with screws or occasionally a plate.

The surgery takes approximately one to three hours.

A catheter will be placed into the bladder while under anaesthesia and this can either stay in over night or be removed before you wake up.

What to expect after anterior lumbar interbody fusion: you will be transferred from theatre to the recovery room before being transferred back to your bed on ward. You may require a PCA with medication via your drip. You will be allowed to have free fluids to drink until you pass wind, ie flatus and then you can eat and drink.

Hospital stay is roughly one to two days. You will be given medication to take home for pain.

Physical therapy will be required but we tend to suggest avoiding twisting and bending.

This procedure quite often is combined with a posterior fusion which tends to occur within five to seven days later.