

Cardiff Spinal Clinic

Mr. Alwyn Jones. MB BCH, Bsc, FRCS, Msc, FRCS (Orth)

AP fusion (anterior and posterior/360° fusion):

AP fusion is a procedure where a patient has a combination of an anterior and posterior surgery. This can be performed on the same day or separated by approximately seven days. The goal of the procedure is to address a painful disc, spondylolisthesis, lumbar spinal deformity as well as foraminal stenosis.

The use of AP fusion allows a cage to be placed in between the vertebrae which therefore reduces the need for this to be done from a posterior approach with the manoeuvring of nerves to be able to proceed with a posterior cage insertion.

Patients are normally in hospital for two to three days after a combined procedure or if these are performed as single events then patients tend to go home in between procedures.

This procedure treats degenerative disc disease, spondylolisthesis, scoliosis, disc pain related to post discectomy surgery ie discogenic pain. AP fusion can be used for trauma, infection and tumour.

Before AP 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.

During AP fusion: if both approaches are to be performed then an incision at the front of the abdomen and also in the back will be performed.

With the front incision the abdominal contents will be retracted, the disc removed, and a cage inserted with bone graft and this will be held in place via either screws through the cage or a plate. The anterior wound will then be closed.

With the posterior incision the muscles are retracted, and pedicle screws are inserted at the appropriate level using x-ray guidance and joined by two rods. A drain will be placed, and the wound closed.

For the anterior surgery a catheter will be inserted which will be removed either after the surgery or the following day.

After AP 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 three 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.