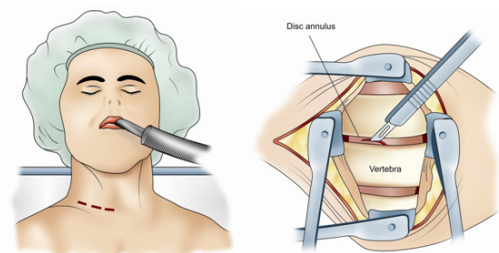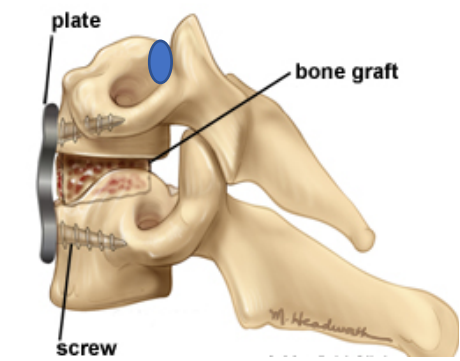# Anterior Cervical Discectomy and Fusion (ACDF)

- This is one the most common procedures performed for cervical nerve root compression or occasionally neck pain.
- The aim of the surgery is to remove the bony spurs that are pressing on the nerve on one side or both sides causing arm pain. sometimes
- Due to degeneration of the disc this procedure is performed to fix the vertebra in the neck together and stop the pain.
- This surgery is performed from the front of the neck through a small minimal access horizontal cut,
- After the disc is removed and the bony spurs removed an implant is inserted between the vertebrae (bones)
- This implant is called a "cage", as it looks like a ring and in the centre it is packed with your own bone that is meticulously harvested from the local bone shavings. Sometimes it is necessary to collect some bone from the iliac crest ("hip bone"), but for most cases this is not necessary and this avoids pain from the site of bone harvest.
- Commonly the cage is secured with a plate and screws but with newer devices this can be avoided as the cage is secured with internal blades that go through the cage itself and therefore no need for a plate. Not having the plate has many advantages including avoiding risk to the adjacent discs, which is very important issue, as it may cause increase risk of future need to extend the fusion to the level above or below.  (see opposite X-rays, examples of type of cages that Dr. Kohan uses for ACDF)
- The main issue with ACDF is the "adjacent level disease" or risk of accelerated degeneration of the adjacent discs. This risk is estimated to be about 10% in 10 years for 1 level fusion. This concern has led to invention of *artificial disc replacement* which may be appropriate for some patients and if so Dr. Kohan will discuss the indications, and pros and cons of this alternative with you.
- Another alternative to consider is _anterior cervical foraminotomy_ instead of having a fusion that Dr. Kohan will discuss with you, if it is an appropriate alternative for you as well as its pros and cons.