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Spine Clinics

Cervical Disc Replacement

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Welcome

Here is our November Issue. We trust you have enjoyed our two previous issues. We appreciate your positive feedback.

Some of you have asked for an email contact in case of queries. The author's email is made available should you wish to clarify or require more information.

Cervical Disc Replacement Surgery

Presentation

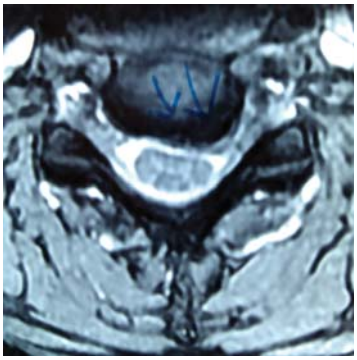
Mr C is a 40 year old man who was involved in an accident when he twisted his neck. There was sudden severe neck pain with sharp shooting pain going down his arms. He was treated with medications and physiotherapy for 4 weeks but the pain did not subside and he developed pararthesia in his forearms.

On examination, he had mild weakness of his biceps and decreased sensation to the C6 dermatome.

Investigations

MRI showed severe prolapsed cervical disc indenting the spinal cord and neuroforamens of C5/6. There was evidence of spinal cord pressure with T2 changes seen on the sagittal views.

Lateral cervical spine flexion and extension x-rays show good movement of the cervical spine. This is important if we are planning to insert and artificial disc.



Axial MRI image showing prolapsed disc at C5/6 compressing the nerve root and deforming the spinal cord.

Treatment

He needed decompression of the spinal cord and nerve roots. Generally, early decompression results in more complete recovery. There are several options to treat this common disorder:

1) Anterior cervical disectomy and fusion

2) Anterior cervical disectomy and arthroplasty (artificial disc)

3) Posterior decompression

We decided to approach this problem via an anterior cervical disectomy and replace the damaged discs with artificial ones.

The advantage to Mr C is that he would not need to lose any cervical mobility, no need to wear a cervical brace post op and no risk of increased adjacent disc disease.

The transverse incision is used in this case. It lends itself to healing very nicely with minimal scarring. Once the damaged and prolapsed disc was removed, the endplates were prepared and the artificial disc inserted. This particular implant does not require too much drilling and is, therefore, safer.

Results

Mr C was admitted for a total of 3 days. He was discharged with no need for any pain medication. The radicular pain and parathesia had fully resolved.

Flexion and extension lateral C-spine x-rays showing the mobility provided by the artificial disc at the operated level

Transverse cervical incisions generally heal very well and can be hidden in the neck creases.

Summary

Cervical disc replacement is a good option for those who require decompression of the cervical spine and would like to maintain their cervical mobility and shorten their recovery process.

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