

(A Health Awareness Initiative)

NEURO NEWSLINE

DISC PROLAPSE AND ITS MANAGEMENT

Intervertebral disc disease is as old as humanity itself. Skeletal remains from all periods, from the era of early humans to modern times shows evidence of damage to the vertebral column and disc due to wear and tear. A high prevalence of these conditions merely reflects today's longer life expectancy, and it often affects relatively younger people. Hippocrates (460-377 BC) has first given the description of sciatica as "hip pain" and he treated them by cauterisation with a hot poker.

Disc related complaints particularly low back pain are very common, and almost all of us will suffer sometime during our life. The point prevalence of back pain is 35 % ie., 35 % of individuals will state that they are experiencing back pain on the day they are questioned. The lumbar region is affected 62%, the cervical spine 36% and a few cases of thoracic disc prolapse (2%) do exist.

Local and radiating pain due to intervertebral disc disease are generated by irritation of different components of the nervous system. The pain may be 'referred' ie., it may be felt in the distribution of an irritated segmental nerve (example Sciatica). The other is the 'local' pain that is felt at the site of the causative problem like the prolapsed disc in the cervical and lumbar regions

(neck and back).

CONSERVATIVE TREATMENT (Medical)

A conservative or medical management is followed where the patient presents with only back pain without any radiation of pain to the limbs. Bed rest, activity modification and physiotherapy may help patients with mild disc prolapse based on the MRI findings. Analgesic (pain killers) can be used for a short period for symptomatic relief. These consists of the non steroidal anti inflammatory drugs (NSAIDs) or opioids (for severe pain) either taken orally or by parenteral routes. Sometimes muscle relaxants can be used which can give the patient some benefit. Epidural corticosteroid injection may be helpful as it can offer a short term temporary pain relief in patients with acute pain syndrome. Traction is NOT recommended as it just puts the patient to bed rest which can anyway be followed without tying oneself to weights pulling over the neck or low back!

SURGICAL TREATMENT

An emergency or urgent surgical intervention is required when patients present with urinary retention, numbness over the limbs, progressive or profound motor weakness affecting the limbs (Cauda

Equina Syndrome). In these situations the patient MUST NOT wait trying out medical management as the neurological deficit can become irreversible the longer one defers surgical treatment. A relative indication for surgical treatment is acute onset severe shooting pain over the upper or lower limbs due to a large herniated disc prolapse which does not respond to medications. Traction or oral/parenteral steroid therapy or bed rest WILL NOT help a patient in such situations!

The other indications for surgical intervention are those patients with prolonged sub acute, pain syndrome affecting the limbs disrupting his/her normal work pattern for more than 4 to 8 weeks of conservative treatment with analgesics, rest and physiotherapy. MRI of the spine is the gold standard for diagnosing a disc prolapse, and based on radiological (MRI) findings the patient is offered medical /surgical treatment.

There are various options of treating a disc prolapse by surgical means. The conventional method is by laminectomy and discectomy, micro discectomy and the endoscopic methods of disc removal.

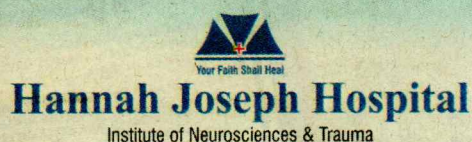
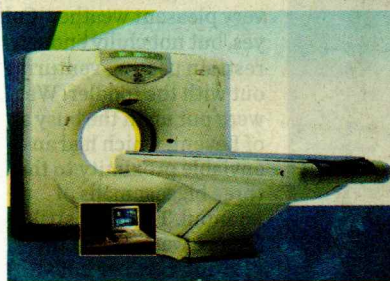
The CHOICE of surgical means is determined by

1. The clinical presentation and neurological deficits
2. Age of the patient and the nature of work he is currently doing
3. Co morbid or associated illness
4. The type of presentation of the prolapsed disc on MRI; co existing canal stenosis (narrowing) or 'listhesis' (movement of the adjacent vertebral bodies)
5. Some patients may require 'spine fusion' with implants if they have multilevel disc disease or co existing spondylolisthesis.

It is very important NOT to be carried away by fancy names and newer terminologies of the surgical procedures ! Each patient may require a surgical procedure based on the 5 salient points mentioned above and not by the surgeons or the patient's choice. The ultimate aim of any surgical treatment is to get good relief of symptoms with the least/nil complications and practically no recurrence of the illness again. It is very important how carefully the prolapsed disc is moved out to relieve the pressure on the nerves rather than getting carried away by new nomenclatures or the size of the scar !

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