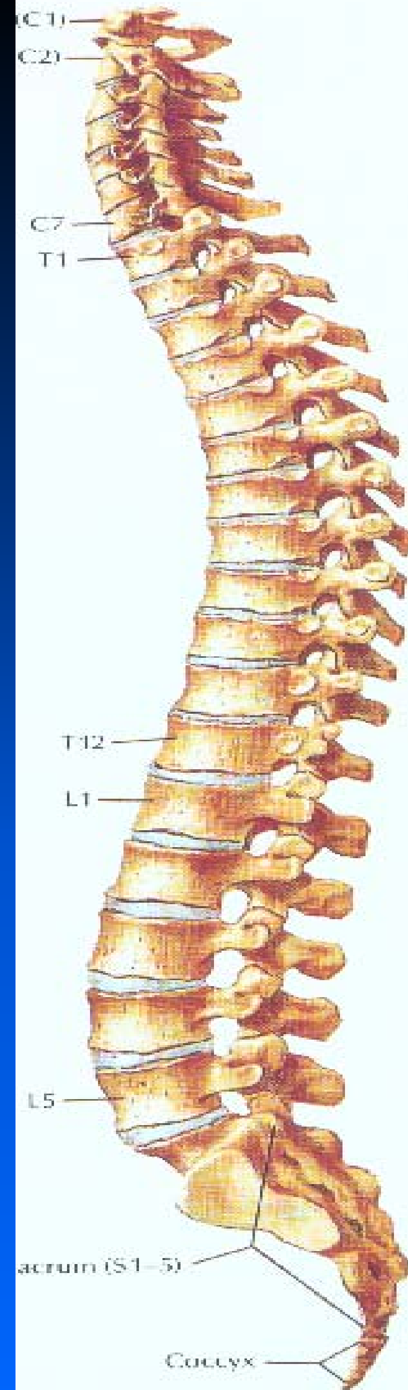
MANAGEMENT OF BACKACHE AND SCIATICA



BED REST

- First attack
- Any attack → early period
- 75 to 80% respond
- Principle – rest to the part – 3wks

FOMENTATION

- After sprain inflammed muscles swell and cause swelling.
- First 48 hrs – cold fomentation with ice.
- After 48 hrs – heat increases blood circulation
  – relaxes muscles

GENTLE MASSAGE

- Helps to loosen tight muscles in spasm.
- Psychological well being effect

MEDICINES

- Anti inflammatory
- Analgesics
- Muscle relaxants Aspiin is still the best
- Antacids
- Small doses of diazepam to relieve apprehention
- Medicines for constipation

TRACTION

Not popular among neurosurgeons. Research has shown its ineffectiveness in backpain

- Helps to restrict activity
- If uncomfortable – stop

PRECAUTIONS

Avoid activities including

- **Straining**
- **Wt bearing**
- **Jerky movements**
- **Tortion of back**
- **Forward flexion**

BRACES & CORSETS

- Helps to restrict movements
- Sense of well being
- Prevails tortional movements

Not to be used for more than 3 wks.

MANIPULATION

- The role of manipulation is disputed.
- Contraindicated in large disc prolapse.
- Not to be tried before diagnosis in established.
- Judicious use by experts can be useful.

EPIDURAL BLOCK

- Very valuable
- Immediate relief from pain
- Should not have neurological deficit
- SLR should be more than 45°
- Should not have bilateral signs

EPIDURAL BLOCK PROCEDURE

- Tuohy needle
- 20 mls of 0.75% local anesthetic
- 80 mg. long acting steroids -Depomedrol methyl prednisolone acetate
- L.P. at L3/4, L4/5 interspace
- Rapid injection

EXERCISES

Back school

- » Mechanics of spine
- » ADL with least use of spine
- » Avoid stress on spine
- » Advice on various positions and postures

Aim : Keep muscles strong. Avoid postural deformity.

Combination: Flexion, extension, isometric

EXERCISES

Steps:

- Warm up
- Muscle stretching
- Muscle strengthening
- Relaxation

Maintaining a regular exercise programme is the best way to prevent the back from attacks of strains and pains.

INDICATIONS FOR SURGERY

- Failure of complete bed rest
- Recurrent episodes.
- Pain preventing resumption of work
- Pain spreading to other areas
- Presence of neurological deficit
- Involvement of sphincters
- Cauda equina compression

PRINCIPLES OF SURGERY

- Decompress the root
- Prevent further extrusion
- Avoid too much scarring
- Minimum handling of muscles
- Least excision of bone
- Early mobilisation
- Early discharge
- Early resumption of work

OLD ADAGE

- Routinely exploring 2 disc spaces – wrong
- Routine laminectomy – wrong
- Bilateral exploration – wrong

THE LAMINECTOMY

Introduced by Mixter and Barr in 1934

- Today there is no indication to laminectomy in PIVD
- May create instability
- Involves lot of scarring & morbidity
- Cannot return to work early
- Introduces restrictions on life

HEMILAMINECTOMY

- Lamina on the side of PIVD in removed
- Spinous process and opp.lamina preserved
- It is extension of fenestration approach
- Can be used occassionally for better exposure

THE FENESTRATION

- The approach is good and adequate
- Unilateral exposure
- Minimum damage
- Ligamentum flavum removed
- Contiguous margins of laminae removed.
- 2/3 upper lamina and 1/3 lower lamina removed.

MICROLUMBAR DISCECTOMY

- Best method, today, for excision of the prolapsed disc
- Short paramedian incision – lcss than one each
- Bone is not touched
- The approach is through lateral half of lig.flavum.
- Good illumination, magnification and direct 3-D visualisation
- Only sick portion of the disc is removed
- More than 4 gms can cause settlement of disc space
- Meticulous haemostasis
- Same day mobilisation
- Discharge within 24 hours

AUTOMATED PERCUTANEOUS LUMBAR DISCECTOMY (APLD)

- Through a small revolving knife introduced into the disc space, enough disc tissue is removed to produce decompression
- Blind technique
- Limitations of technique
- Not popular
- Results uncertain

ENDOSCOPIC DISCECTOMY

- Endoscope is put into the disc space
- Paramedian approach.Has limitations
- Tissue is visualized - 2D vision
- Enough disc tissue can be excised.
- Principle involves decompression of disc by excising certain volume.

FUSION AND PIVD

INDICATIONS

- Massive disc prolapse
- Central disc prolapse is young
- Anticipated settlement.

COMPLICATIONS

- Wound infection
- Disc space infection
- Dural tear
- Neurological deficit
- Instability
- Failed back
- Recurrence
- Cauda equina syndrome

POST OP. RELIEF OF PAIN

- Sciatica improves immediately.
- Backache improves in few days
- Stiffness is relieved in 15 days.
- Numbness and paraesthesiae takes a long time to improve.May not improve fully.

THANK YOU