

FAILED BACK SPINE SURGERY (FBSS)

INVESTIGATION AND CLINICAL ASSESMENT

MAHALAPYE 2013

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PERSPECTIVE

As many as 50% of FBSS patients, on review of

original history

clinical assessment

diagnostic studies

have not met the generally accepted criteria for a primary surgical procedure.

THERAPEUTIC GOALS

Pain relief

Neurological improvement

HISTORY

- Go back to beginning
- Chronologically piece the story together
- Approach as if your 1st contact with patient
- Acquire all the previous clinical notes/ op notes
- Make contact with the previous surgeon
- Input from the GP/physio/chiro, re analgesia usage secondary gain

HISTORY

- Current complaints, relative to before surgery/ after surgery
- When the problems started
- What % of residual problem is still present

Gain insight into pain behavior substance usage psycho-social issues

CLINICAL EXAMINATION

- Patient must undress
- Complete assessment of the patient
- No assumptions
- Expand the examination
- Compare findings

CLINICAL EXAMINATION

Determine whether the patients problem is indeed spinal.

Think about gynecological abdominal vascular orthopedic systemic causes

PURPOSE OF THE INVESTIGATIONS

Residual of the previous problem

New problems assoc with the interventions or

Missed problems

Arachnoiditis

Fibrosis

Nonunion

Instrument failure

Infection

Flat back deformity

LIKELY DIAGNOSIS

ANATOMICAL

Difficult with 1st surgery

More complex with recurrent problems

LIKELY DIAGNOSIS TIME OF PRESENTATION

Immediate incorrect diagnosis

poor technique

Short term relief return of pain

? Infection

Medium term

re-herniation

fibrosis

arachnoiditis

Long term

instability

stenosis at adjacent level

ongoing degenerative change

66 yr female

Myasthenia gravis

Chronic cortisone usage

Osteoporosis with compression fracture

Previous lumbar fusion

Referred as paraparetic

Back pain ++, and inability to walk

Power 5/5

Touch & pin prick normal

No myelopathy

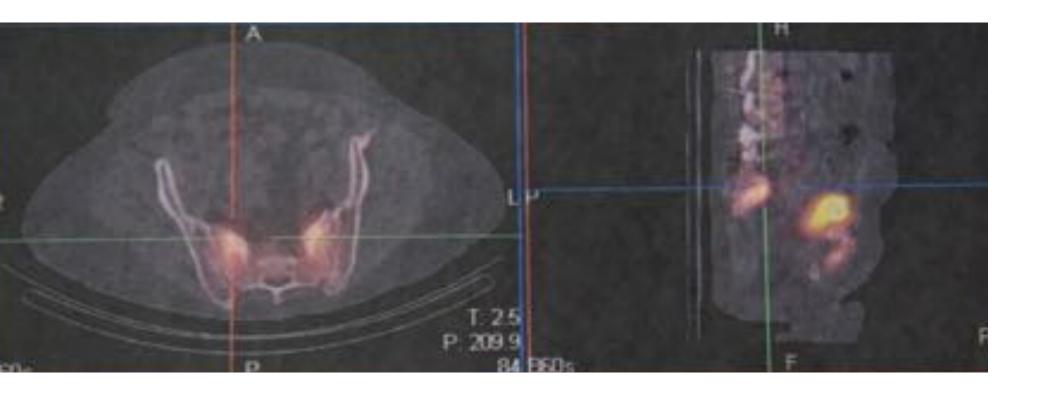






MANAGEMENT??

- 1.conservative Mx
- 2.decompression T11 /T12
- 3.decompression T11 /T12 and fusion T11 /T12
- 4.other



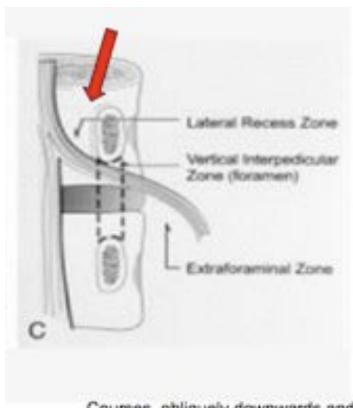
LATERAL RECESS STENOSIS

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Verbiest 1940

Still remains the most common cause of "failed back syndrome"

failure to recognise the entity failure to adequately decompress the recess



LATERAL RECESS BORDERS

Lateral. Pedicle

Posteriorly Superior articular

process

Anteriorly Vertebral body

Medial Thecal sac



Courses obliquely downwards and laterally

Xrays LUMBAR: AP, FLEX, EXT

PELVIS: AP

BLOODS FBC, ESR, CRP, Alk phos,+ other.







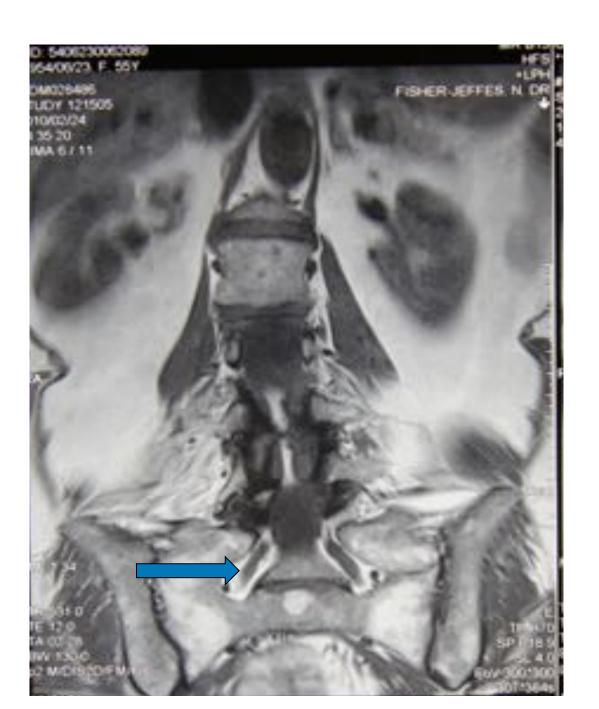


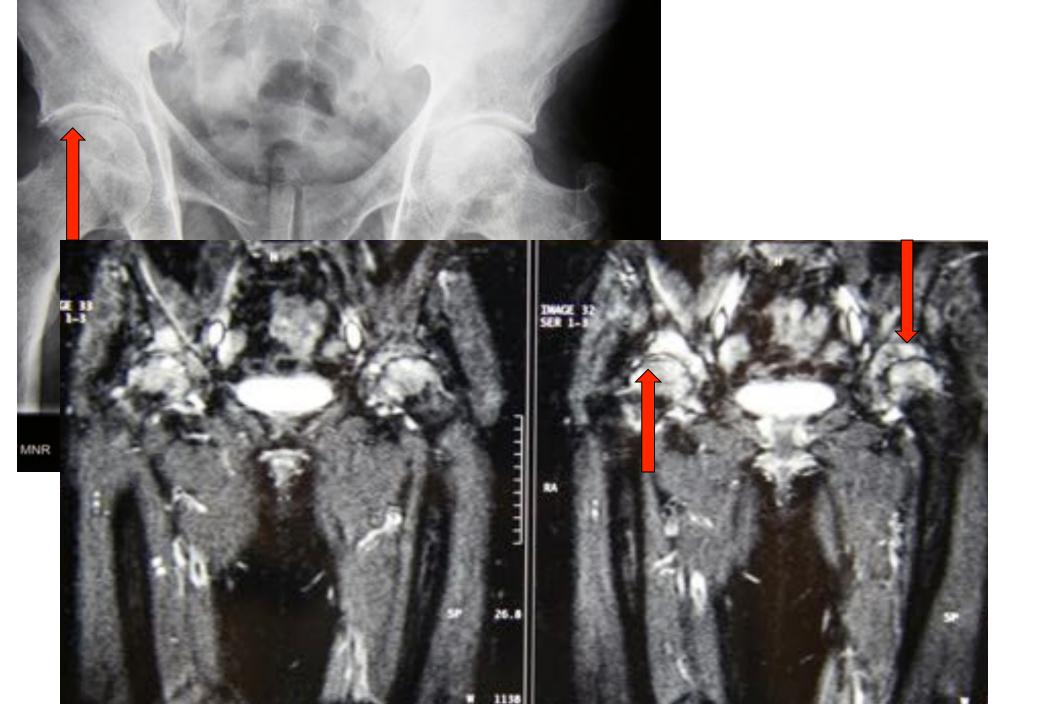
MRI standard protocol

use of coronal cuts

CT Myelogram

BONE SCAN for specific indications inflammatory\infective



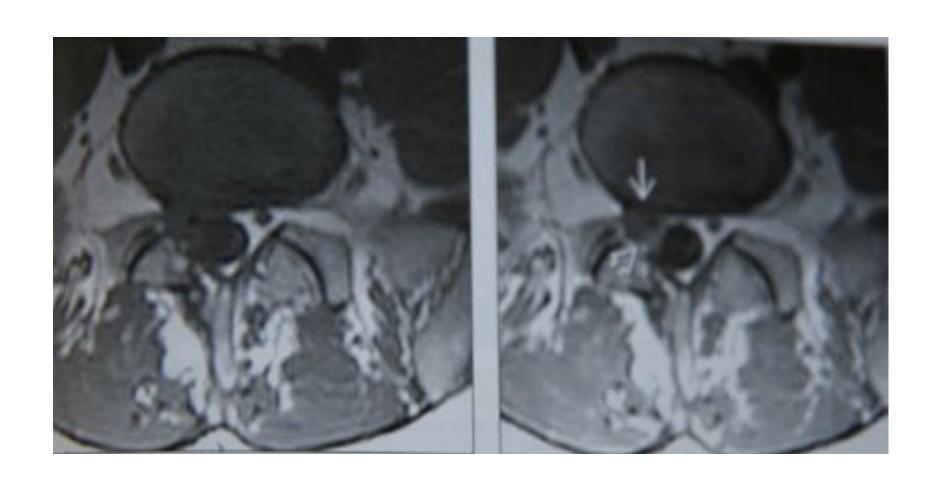


Precise correlation of history, clinical findings and investigations is necessary **now more than ever**; especially because of the sensitivity of MRI.

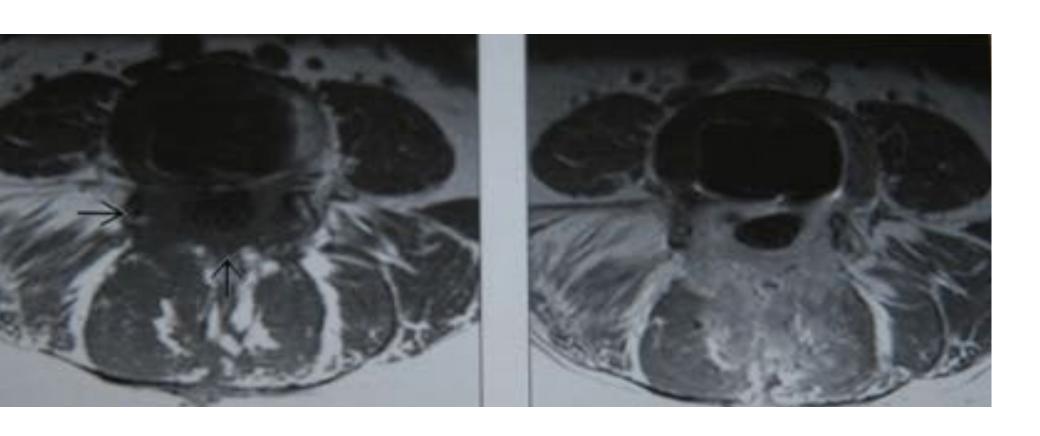
Non specific spondylotic changes often do not correlate with the patients symptoms, nor the need for surgery.

MRI should be used to **CONFIRM** the clinical diagnosis

RECURRENT DISC



PERIDURAL FIBROSIS



ELECTROPHYSIOLOGY

Little value----extremely valuable

Very operator dependent

Later the better

Differentiate; root; cauda equina; peripheral nerve

- Always interpret scans ,x-rays yourself
- Mindful of costs
- Treat the patient not the images
- "Tight fit" symptoms

signs

investigations

PHYSIOLOGICAL TESTING

Discography no credible evidence

Nerve root blocks no credible evidence

Facet blocks direct intra-articular

Psychological testing

no credible evidence to submit all patients to a battery of tests.

If clinicians concerned then refer to psychiatrist

- 22 years old football injury = onset LBP
- **25 years old** declined admission to military due to back "issues" neurosurgical & orthopaedic opinion , nonsurgical
- 28 years old Following intensive rehabilitation program = Fit for active Naval duty later same year boat rammed in military action

 LBP exacerbated

Different neurosurgeon consulted

Neurologically intact. Vague findings on spinogram underwent left laminotomy L4/L5 L5/S1 [1] Very slow recovery - ++ muscle spasm

+- 1 Year later Returned to first surgeon who questioned "indication for Sx without doing more sensitive investigations

AP & Lateral x-rays - essentially normal, no degenerative disease, no spondylosis, no lithesis.

Progressively worsening symptoms LBP; conservative Mx with steroids, corset

37 years old

L5/S1 disc space collapsed; early osteophyte formation

Co-morbidity - Addison's disease

Medication - long term use corticosteroid

Surgical Intervention

Posterior fusion L5/S1 and left SIJ fusion - Wilson plate {2}

L5 Spinous process wire

No artificial disc (Fenstrom balls)

Stormy recovery UTI;

deep wound infection necessitating repeated packing and {3+4}

secondary closure

Rehabilitation followed with symptomatic treatment of muscle spasm & trigger points

3 Years later

Recurrent abscess of lumbar spine wound (Staph Aureus) {5}

4 years later

- Increasing dependence on amphetamines; steroid injections & alternate therapies
- Episodes of using crutches to walk.

5 years later – Change of physician

- consensus No more surgery
- focus shift away from chemical management to water aerobics; strengthening & flexibility exercises
- use of external bracing corset
- getting on with life



"His continued, exceedingly high level of activity not only illustrates his personal determination but also serves as a notable demonstration that such patients can maintain a substantial functional status despite their physical incapacity."

Robert A Hart. The Orthopaedic Forum, JBJS, 2006

Inappropriate patient selection

Neurologically intact, however based on an air spinogram underwent left sided laminotomy L4/L5 and discectomy L5/S1

Addison's disease

Family pressure to run for congress

Incorrect pre op diagnosis /Inadequate work up

Normal Xrays.limited investigations

Unrealistic patient expectation

Immediate return to work, congress, senate, president Reported hectic social life

Surgical complications

Very slow recovery / spasms, UTI, wound infection

INVESTIGATE EARLY

Establish accurate diagnosis early, and propose and institute Rx and Mx program before the pain and behavior becomes fixed.

The patient must retain confidence in their surgeon

INVESTIGATE EARLY

Advise and guide your patient

Inappropriate surgery

Inappropriate alternative interventions

Financial implications

Recognize the limitations and benefits of surgical intervention.

If there is not a neural compressive problem, or a mechanical instability problem,

then surgery will contribute to the devasting FBSS

THANK YOU

Cure your spine problem within 20 min.



walking and was walking normally im mediately and her paralysis hospitalized. She was disappeared. diagonised as Acute Lumber dies prolapse Dr. Prasham shah is between third and fourth the First Indian vertebra with paralysis Orthopaedic of left knee muscles Surgeon to bring

(Oudriceps) which had resulted in the fall. Ilizarov technique (Russian) and Ozone H

with help of imaging technique the was given injection of Ozone in the offending disc. The procedure was done under local anesthesia and it took all of 20 minutes. Immediately on administering the injection her pain disappeared and she could Disc blasted with Ozone turn and sit in Bed: actions that Injection Displacing Dye surgery and spinal

Mrs. Nirupamma had a were impossible to perform when she instrumentation. Spinal canal stenosis can sudden fall while suffered the fall. In three days she started a l s o b e

Under normal circumstances she should therapy in INDIA. On our correspondent TREATED be needing emergency surgery for the disc inquiring about the safety of this MANY PATIENTS WHO HAVE bit to her good fortune she contacted procedure, Dr. Shah said, "since Ozone is PREVIOUSLY FAILED SPINAL Dr.Prasham Shah-an Orthopaedic & made up of three molecules of Oxygen, SURGERY, simply by introducing ozone Arthroscopic Surgeon who was confident injecting it in the disc has No side effect at in disc and epidural space. In more then that surgery was not essential and that all. As a matter of fact the third molecule 600 patients treated with Ozone, be claims there were alternate methods of treatment. takes away the water content of disc which 85 to 90% success rate. He also added She was taken to the operation theatre and is 80% of the total disc, thus collapsing the there were other multiple uses of Ozone in

pressure on the spinal cord. RHEUMATOID WITH OZONE ALCOHOLIC NEURITIS Etc. the patient to avoid going 103 Doctor Contro through the trauma of

No Rest & No Surgery Slipped Disc treated with ozone injection in Epidural space claims 'Dr. Shah.



disc & relieving the Orthopsedic conditions like: Even MULTIPLE DISCS OSTEO ARTHRISTIS, AVASCULAR CAN BE TREATED NECROSIS. DIABETIC &

INJECTION, enabling For Further information, Contact:



Inadequate work up

 Nov 1944 - returned to first surgeon who questioned "indication for Sx without doing more sensitive Pantoque myelogram"

 Did not follow up on what had previously been done / decided

Incorrect preoperative diagnosis

 AP & Lateral x-rays - essentially normal no degenerative disease, spondylosis, spondylolisthesis

Unrealistic patient expectations

- SX 1944 Immediate return to work ran for Congress 1945
- Surgery 1954 Serving senator 1953 to 1957
- Ran for President 1960
- Reports of hectic social life

Surgical complications

• 1944 - Very slow recovery - ++ muscle spasm

1954 – Infection and UTI

Comorbitidies

Co-morbidity - Addison's disease

- Medication long term use corticosteroids
 - no evidence osteoporosis

Psycho-socio-economic factors*

- Personal / other pressure to continue regardless
- Unrealistic expectations
- Dependency on cortisone and amphetamines
- Failure to adapt lifestyle to back

Previous surgery

 1944 - Left sided laminotomy L4/L5 and discectomy L5/S1

October 1954 - Posterior fusion L5/S1 and left SIJ fusion

Previous infection

- 1954 Deep wound infection necessitating repeated packing and secondary closure
- 1957 Recurrent abscess of lumbar spine wound (Staph Aureas)