BACK PAIN
Red Flags & Referral for Surgery

B BALAIN
Cons Spine Surgeon
RJ&AH Orthopaedic Hospital, Oswestry
Mini Quiz

Diagnosis?

Role for Surgery?
Patient history no 1

- Low back Pain for 6 months, getting worse slowly
- Physio and pain killers tried
- Worse after walking, and after playing sports. Relieved by lying down.
- No pain at night & No leg pain
- Age 14yrs
Patient history no 2

- Pain for 9 months, getting worse slowly
- Physio and pain killers tried
- Low back Pain worse after standing and walking, and after playing sports. Relieved by lying down.
- No pain at night & No leg pain
- Age 35yrs
Patient history no 3

- 55 year old female
- Pain for 12 months, getting worse, tried physio and pain killers
- Low back Pain worse after sitting or standing still, and better with moving around.
- Pain while turning at night, and first thing in the morning with stiffness for 15 minutes
- Pain in both buttocks and lateral thighs
Patient history no 4

- 40 year old male
- Few years of back pain
- Pain gets better as the day goes on, and with exercise
- Early morning stiffness lasting for more than an hour
- Tennis elbow and achilles pain
Patient history no 5

- 65 years, male
- LBP for many years, getting worse in last 3 months
- Had physio and pain killers
- Pain increasing in intensity
- Pain gets worse with standing and walking
Red Flags

- “TUNA FISH”
  - Trauma
  - Unexplained Weight Loss
  - Neurological Deficit
  - Age More Than 50
- Fever
- IV Drug Use
- Steroids For A Long Time
- History Of Cancer
Missed Red Flags

- Previous cancer
- Change in severity of pain, not character
- Increasing analgesic use
Cascade of degeneration
Micro-instability
Pain into the limbs

- Radicular pain
  - Sharp shooting electric pain

- Referred pain/ Overflow pain
  - As back pain gets worse, this pain gets worse
  - No leg pain if there is no back pain

- Below the knee!!!
BACK PAIN DOESN’T COME ALONE ALL THE TIME!

- **Radiculopathy**
  - Symptoms in a particular nerve root distribution
  - LMN

- **Myelopathy**
  - Symptoms due to spinal cord pressure resulting in upper motor neuron signs
  - UMN
  - Degenerative / Red Flag
DON’T FORGET CERVICAL MYELOPATHY
Listen to the patients!
EXAMINATION

ROMBERG TEST

WALKING ROMBERG TEST

- Best Scientific Paper Award, Combined BASS and BCSS meet, Feb 2009, Sheffield
Lumbar canal stenosis

History
- Differentiate back pain from leg pain
- Neurogenic or Vascular Claudication

Examination
- Hips
- Peripheral pulses
Back pain due to degenerative disc disease

- Discogenic
  - ‘Downers’

- Facet arthritis pain
  - ‘Uppers’

- Combined

THE ONLY ACCEPTABLE UPPERS AND DOWNERS IN FOOTBALL
Back pain due to listhesis

- No special features
Life expectancy of early man

The mean life expectancy of kings of Scotland and England, reigning from 1000 A.D. to 1600 A.D. were 51 and 48 years, respectively.

Only five percent of monks survived past 45.

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Number of Males Observed</th>
<th>Further years of life expected at age 21</th>
</tr>
</thead>
<tbody>
<tr>
<td>1200-1300</td>
<td>7</td>
<td>43.14</td>
</tr>
<tr>
<td>1300-1400</td>
<td>9</td>
<td>24.44*</td>
</tr>
<tr>
<td>1400-1500</td>
<td>23</td>
<td>48.11</td>
</tr>
<tr>
<td>1500-1550</td>
<td>52</td>
<td>50.27</td>
</tr>
<tr>
<td>1550-1600</td>
<td>100</td>
<td>47.25</td>
</tr>
<tr>
<td>1600-1650</td>
<td>192</td>
<td>42.95</td>
</tr>
<tr>
<td>1650-1700</td>
<td>346</td>
<td>41.40</td>
</tr>
<tr>
<td>1700-1745</td>
<td>812</td>
<td>43.13</td>
</tr>
</tbody>
</table>
The shape of things to come
Back pain differential

- Most important point-AGE!
< 20 yrs age

- Lysis or listhesis
- Deformity
- Tumors
- Ligamentous laxity
20-50 years

- Disc degenerative disease
  - Primary
  - Secondary (previously asymptomatic lysis)
- Inflammatory arthritis
>50 yrs age

- Disc degenerative disease (+/- LCS)
  - With or Without-
    - Listhesis
    - Scoliosis

- Tumors

- Infection

- Osteoporosis (fractures)
Axial neck pain

Fig. 3
Composite map of axial pain patterns produced by injections into the facet joints at the second through seventh cervical levels. (Reprinted, with permission, from Dwyer A, Aprill C, Bogduk N. Cervical zygapophyseal joint pain patterns I: a study in normal volunteers. Spine. 1990;15:453-7.)
10 minute consultation

- What is worse- back or leg?
- Type of back pain or leg pain?
- Red flags?
- Occupation or sleep affected?
Mini Quiz
Patient history no 1

- Pain for 6 months, getting worse slowly
- Physio and pain killers tried
- Low back Pain worse after standing and walking, and after playing sports. Relieved by lying down.
- No pain at night
- No leg pain
- Age 14yrs
Patient history no 2

- Pain for 9 months, getting worse slowly
- Physio and pain killers tried
- Low back Pain worse after walking, and after playing sports. Relieved by lying down.
- No pain at night
- No leg pain
- Age 35yrs
Patient history no 3

- 55 year old female
- Pain for 12 months, getting worse, tried physio and pain killers
- Low back Pain worse after sitting or standing still, and better with moving around.
- Pain while turning at night, and first thing in the morning with stiffness for 15 minutes
- Pain in both buttocks and lateral thighs
Patient history no 4

- 40 year old male
- Few years of back pain
- Pain gets better as the day goes on, and with exercise
- Early morning stiffness lasting for more than an hour
- Tennis elbow and achilles pain
Patient history no 5

- 65 years, male
- LBP for many years, getting worse in last 3 months
- Had physio and pain killers
- Pain increasing in intensity
- Pain gets worse with standing and walking
Real history

62 yrs, female, steroids for 14 years for myositis, Cushingoid, recurrent chest infections, chemotherapy for lymphoma of jaw last year

Severe mid thoracic back pain for 4 weeks, mild fall only

Not settling for 3 months
Legs have given way twice in the last few weeks

Band like pain in the upper abdomen for a few months

Prescribed patches for pain at 4 months

Pain gets worse with any activity, and relieved by lying still

Right leg gives way, within 12 hours complete paralysis.
Role for surgery

- Neurological Problems - Surgery Has A Good Role
- Surgery For Back Pain Alone - Last Resort only!

INDICATIONS FOR SPINE SURGERY -
- Can’t sleep
- Can’t Work
‘Painless Neurology’
  ◇ MEDICAL CAUSE

‘Painful Neurology’
  ◇ SURGICAL CAUSE (Compression related)
Surgery for Back pain?

Nothing feels right since they switched brands of milk. The bottle cap just isn't as fun...
I can deal with it... I've been eaten by a snake, but I'll just go on with my life... I'm okay!

Lewis tests the limits of positive thinking.
NICE GUIDELINES
Definition of LBP

- Persistent or recurrent low back pain
- Defined as **non-specific low back pain**
- Lasted for more than 6 weeks, but for less than 12 months.
Non-specific low back pain

- Tension, soreness and/or stiffness in the lower back region
- **It isn’t possible** to identify a specific cause of the pain.
A clinician who suspects that there is a specific cause should arrange the relevant investigations.
NOT INCLUDED

- Malignancy
- Fracture
- Infection
- Ankylosing spondylitis and other inflammatory disorders
Cauda equina syndrome

Common causes-
- Large Disc prolapse
- Metastatic compression
- Severe spinal stenosis
- Trauma/Iatrogenic
- Medical causes
CES- questions to ask?

- Can u feel the baldder filling up?
- Can u feel the stream passing through?
- Do u ever wet yourself without realising?
- Any numbenss around the back passage?
- Do u wet yourself due to inability to reach the toilet in time?
- What happens with coughing and straining?
INVALUABLE TOOL

Neurotips™
100 Sterile Neurological Examination Pins

Owen Mumford
Single use for safety
ANOTHER DIFFERENTIAL

BACK PAIN

Spine 1994 May 15;19(10): 1148-52

• If problems are intermittent, do they get worse when back pain is worse, and settle when back pain is better?
Difficulty in initiating micturition-

Think OPIOIDs and Severe Pain

Constipated-

Think OPIOIDs and Severe Pain
Thanks for your attention