The Fifty Shades Of Low Back Pain

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LOW BACK PAIN (LBP)

- Traditionally described as pain that is primarily localized to the lumbar and lumbosacral area that may or may not be associated with leg pain.

INTRODUCTION

- LBP is a common painful condition that is encountered both in general and specialist practice
- *P* of LBP = *10-63%* (median 37%)
- ♂= ♀
- In Malaysia the *P = 60 %* (commercial vehicle drivers) [1]

Industrial Health 2007, **45**, 268–278

Original Article

The Association between Risk Factors and Low Back Pain among Commercial Vehicle Drivers in Peninsular Malaysia: A Preliminary Result

Shamsul Bahri Mohd TAMRIN[1]*, Kazuhito YOKOYAMA[1], Juliana JALALUDIN[2], Nasaruddin Abdul AZIZ[3], Nizam JEMOIN[4], Rusli NORDIN[5], Ayub Li NAING[5], Yunus ABDULLAH[2] and Mazlan ABDULLAH[5]

Malaysian Orthopaedic Journal 2010 Vol 4 No 2

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Prevalence and Risk Factors Associated with Low Back Pain Among Health Care Providers in a District Hospital

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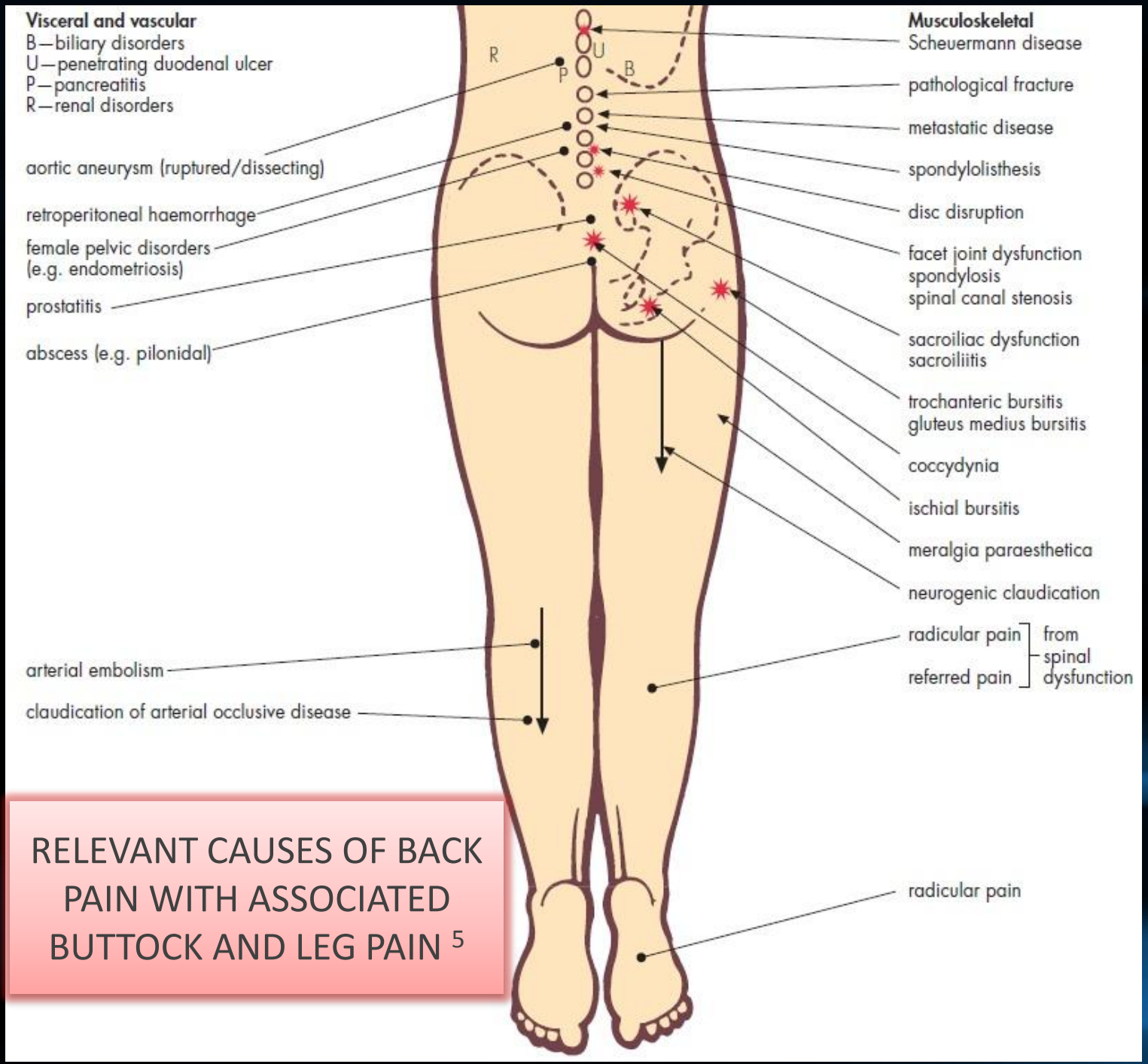
- Approximately 85–90% of the population will experience back pain at some stage of their lives [2].
- 50 % will recover within 2 weeks and 90 % within 6 weeks.
- Recurrence frequency 40-70% [3].
- 2-7% will develop chronic pain [3].

- The most common age groups are the 30s, 40s and 50s, the average age being 45 years [4].

- The most common cause of back pain is a minor strain to muscles and/or ligaments*.



RELEVANT CAUSES OF BACK PAIN WITH ASSOCIATED BUTTOCK AND LEG PAIN [5]

CLASSIFICATION OF BACK PAIN

Acute	**< 12 weeks**
Chronic	> 12 weeks

The Malaysian LBP management guidelines, 1st edition

TYPES OF BACK PAIN

- Vertebral
- Non- vertebral
- Non- specific back pain

EVALUATING A PATIENT WITH LBP

- Understand the symptoms
- Interpretation of the physical signs
- Look for Red flags and Yellow flags

DIAGNOSTIC STRATEGY MODEL

- Probability Diagnosis
- Serious Disorders Not To Be Missed
- Pitfalls (Often Missed)
- Seven Masquerades Checklist
- Is This Patient Trying To Tell Me Something?

RED FLAG POINTERS FOR LOW BACK PAIN

Age >50 years or <20 years
History of cancer
Temperature >37.8°C
Constant pain—day and night especially severe night pain
Unexplained weight loss
Symptoms in other systems, e.g. cough, breast mass
Significant trauma
Features of spondyloarthropathy, e.g. peripheral arthritis (e.g. age <40 years, night-time waking)
Neurological deficit
Drug or alcohol abuse especially IV drug use
Use of anticoagulants
Use of corticosteroids
No improvement over 1 month
Possible cauda equina syndrome*

YELLOW FLAG POINTERS

- **Abnormal illness behaviour**
- Compensation issues
- Unsatisfactory restoration of activities
- Failure to return to work
- Unsatisfactory response to treatment
- Treatment refused
- Atypical physical signs

PHYSICAL EXAMINATION

Essential Examinations	Points to note
Heel and Toe walking Significant muscle weakness	▪ Significant muscle ▪ weakness if unable to ▪ perform this
Cross Straight Leg Raising	▪ Prolapsed disc with significant nerve root impingement
Muscle Strength Big toe flexion and extension Ankle flexion and extension	▪ Weakness indicates significant nerve root or cord compression
If loss of bladder/bowel control is present check perianal sensation and anal tone	Saddle anaesthesia and/or lax anal tone indicates cauda equina lesion

INVESTIGATIONS

- Front-line Screening Tests;
- Specific Disease Investigations;
- Procedural / Preprocedural Tests.

Management of Low Back Pain

"It Is Important To Keep In Mind That We Are Treating People And Not Spines"

Waddell 2004

ACUTE LOW BACK PAIN

- Rule out ‘red flags’
- Reassurance.
- Symptomatic pain relief inhibitors.
- Avoid bed rest.
- Avoidance of over-investigation at this stage.
- Early return to work.

CHRONIC LOW BACK PAIN (NON-SPECIFIC BACK PAIN)

- ❑ Activity modification
- ❑ Medication
- ❑ Physiotherapy
- ❑ Occupational therapy
- ❑ Patient education
- ❑ Prevention programme
- ❑ Psychological approaches
- ❑ Smoking cessation (where appropriate)
- ❑ Weight loss programme (when indicated)
- ❑ Assistive devices / orthosis (when indicated)

EXERCISE TESTING

- Little to no evidence of contraindication based on LBP alone
- Many clients/patients with chronic LBP have reduced Cardiorespiratory Fitness CRF levels compared to the normal population.
- Current evidence couldn't find a clear relationship between CRF and pain [6]

- The advice to stay physically active is nearly universal in current clinical practice guidelines for LBP [7,8,9]

- Reduced muscle strength and endurance in the trunk has shown an association with LBP [10]

- There is no clear relationship between gross spinal flexibility and LBP or associated disability [7]

- Physical performance tests can be another indicator of the functional impact of LBP


Rx
Exercise!

- Clinical practice guidelines for the management of LBP consistently recommend staying physically active and avoiding bed rest [11]

- There is no preference of once type of exercise over another [11]

- In chronic LBP, exercise programs that incorporate individual tailoring, supervision, stretching, and strengthening are associated with the best outcomes [8,12]

FITT MODULE OF LBP BASED ON PERSONAL EXPERIENCE

- ❑ Warm up extended (5-10 min)
- ❑ Conditioning (10-15 min)
  - Aerobic
  - Resistance
  - Core trunk exercise
- ❑ Cool down extended (5-10)
  - Yoga
  - Breathing exercise
  - Balance
- ❑ Stretching (3-5 min)
  - ROM
  - Slightly beyond pain limit

SPECIAL CONSIDERATIONS

- Exercises to promote spinal stabilization are often recommended [13,14]
- Avoid certain exercises or positions may aggravate symptoms of LBP.
- Exercises or movements that result in a "centralization" of symptoms should be encouraged [15,16,17]
- Flexibility exercises are generally encouraged as part of an overall exercise program.

THE BOTTOM LINE

- LBP is a complex multidimensional phenomenon.
- It is very important to understand the nature of the pain before initiating the treatment
- Rule our Red flags and Yellow Flags

- Recommendations for exercise testing and Ex Rx are similar to those for healthy individuals
- Avoid exercise in the very immediate aftermath of an acute and severe episode
- Stay active and avoid bed rest

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