

Role of Physiotherapy

Exercise tips

Lifestyle changes

GP Masterclass Series

Low Back Pain

Clive Sherwood, 29th September 2010

Why bother?

- Doesn't LBP just settle down anyway?
 - 103 patients with acute localised non-specific back pain lasting less than 72 hours - 90% of patients recovered within two weeks and only two developed chronic low back pain (Coste J, BMJ. 1994 Feb 26: **Clinical course and prognostic factors in acute low back pain: an inception cohort study in primary care practice.**)

Why bother? 2

- The course of back pain is highly variable, occurring in transient, recurrent, and chronic phases. Recent longitudinal studies suggest that back pain is typically a recurrent condition and that chronic phases of back pain occur more often than previously believed. (Von Korff M, Spine 1994 Sep 15;19(18 Suppl): **Studying the natural history of back pain.**)

Why bother? 3

- Ninety-six patients with chronic, continuous symptoms for 3 months. Two thirds of patients with chronic low back pain at 3 months had functionally disabling symptoms at 22 months. Forty-six patients underwent surgery. Patients who underwent surgery after 3 months had a Roland disability score at 22 months of 10
- **Once established, chronic low back pain is persistent.** Most patients with chronic low back pain seek little care, and a majority are employed (Carey TS et al, Spine 2000 Jan;25(1): **Beyond the good prognosis. Examination of an inception cohort of patients with chronic low back pain.**)

Physiotherapy

“Physiotherapy is a health care profession concerned with human function and movement and maximising potential:
it uses physical approaches to promote, maintain and restore physical, psychological and social well-being, taking account of variations in health status;
it is science-based, committed to extending, applying, evaluating and reviewing the evidence that underpins and informs its practice and delivery;
the exercise of clinical judgement and informed interpretation is at its core.”

*Chartered Society of Physiotherapy
Curriculum Framework (January 2002)*

Physiotherapy 2

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Physiotherapy 3

- Assessment of movement abnormalities and tissue dysfunction related to pain presentation and loss of function:
 - Posture
 - Joint “play”
 - Muscle hyper- or hypo-tonicity
 - Myofascial restrictions
 - Nerve restriction, peripheral under- or over-activity and central sensitization phenomena

Physiotherapy 4

- Treatment by
 - Manipulation and mobilization of joint and/or soft-tissue restrictions
 - Guided and graded exercises (stretching, strengthening, stamina, stability, speed, etc.)
 - Desensitization techniques (electrotherapy, “manipulations”, acupuncture, etc)

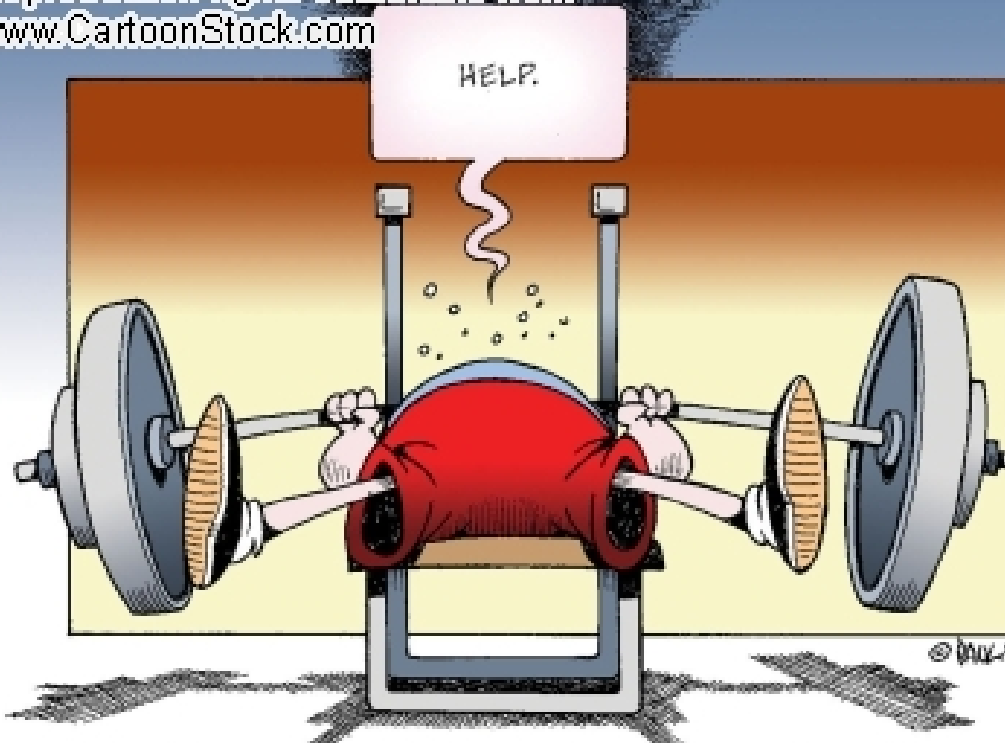
Exercise

- Physical exercise is recommended for prevention of LBP (level A), for prevention of recurrence of LBP (level A) and for prevention of recurrence of sick leave due to LBP (level C).
- There is insufficient evidence to recommend for or against any specific type or intensity of exercise (level C).
 - European Guidelines for Prevention in Low Back Pain (Nov 2004) www.backpaineurope.org

Exercise 2

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NEVER USE YOUR EX-WIFE AS A SPOTTER WHEN YOU
LIFT WEIGHTS AT THE HEALTH CLUB.

Exercise 3

- General activity beats bed-rest
- Consider matching exercise prescription to the patient's individual preferences, general build, workplace needs and lifestyle:
 - Aerobic activity (walking, swimming, cycling, etc)
 - Strengthening activities (weights, McGill exercises, etc)
 - Stabilising activities (yoga, taijiquan, Pilates, etc)

Lifestyle

- Associations between back pain prevalence and lifestyle factors (smoking and obesity) using national survey data, controlled for age, education, exercise and employment:
- Back pain prevalence rose with increasing levels of smoking, relative risk of 1.47 for persons reporting 50 or more pack-years of smoking (association strongest in persons under 45 years, corresponding relative risk = 2.33).
- Back pain prevalence increased with increasing BMI, but prevalence rose substantially only in the most obese 20% of subjects (1.7 times higher than the lowest 20%).
- (Deyo R, Bass JE, Spine 1985 14(5) Lifestyle and Low-Back Pain: The Influence of Smoking and Obesity)

Lifestyle - obesity

- Risks associated with:
 - Pressure on IVD/facets
 - Postural aberration
 - Small vessel occlusion
 - Lack of fitness

Slimming cures

LBP???

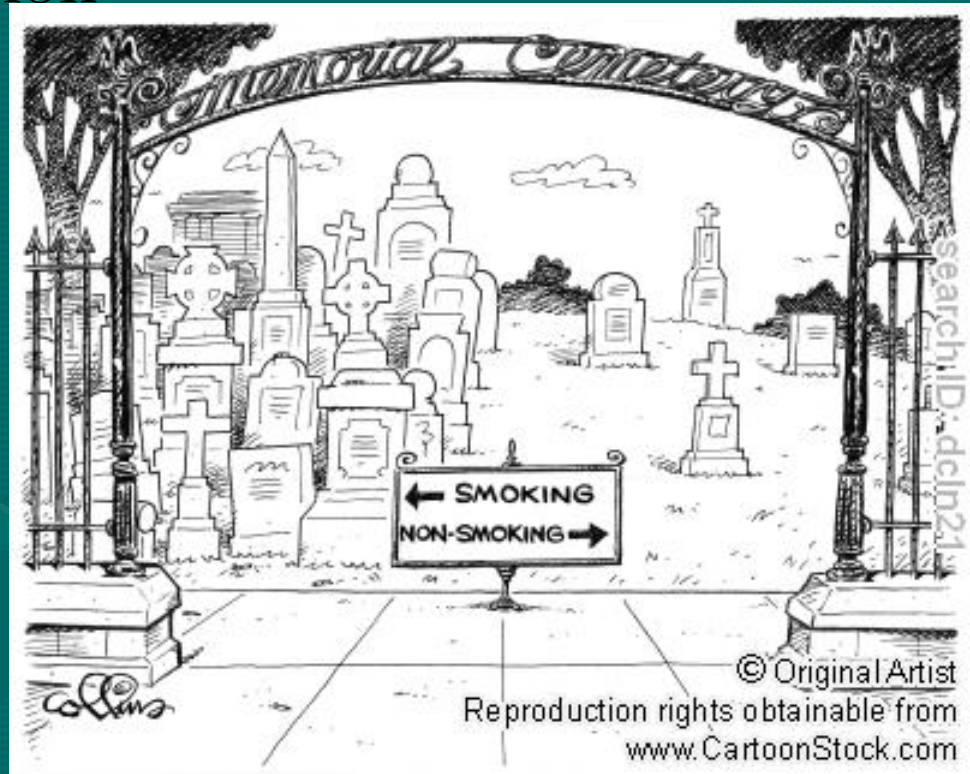


Lifestyle - smoking

- Risks from
 - Small vessel occlusion
 - Chemotoxicity
 - Lack of fitness

Stopping cures

LBP???



Lifestyle - workplace

- Risk factors are:
 - Operation of motor vehicles
 - Use of machine tools
 - Repetitive heavy lifting
(Frymoyer J et al 1983
JBJS 65, Risk factors in
Low Back Pain)



Lifestyle - general

- Evolution gave us a certain lifestyle
 - Diet, posture, active lifestyle, “work” environment
- No wonder we suffer nowadays...

