EDITORIAL

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The neck is not the back: obvious, but the research gap should be reduced

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The neck is not the back: this seems obvious for clinicians engaged in everyday practice but not so for research. Current evidence on low back pain (LBP) *versus* neck pain (NP) treatment raises an astonishingly high number of questions. The most recent Clinical Evidence papers on the Topics [1-3] clearly show differences between LBP and NP (Table I). Even wider is the gap according to papers published on Medline each year in the last decades (Table II); with time, the difference has decreased in percentage but increased in terms of knowledge.

Why these differences in research between NP and LBP? One could argue that the situation is different epidemiologically, but a glance at the numbers reveals that this is not the case: the lifetime prevalence of NP is 67% *vs* 70% for LBP, while the yearly prevalence of LBP is 15-45% and the 6-month prevalence of NP is 55%.[1, 4] Perhaps the problem could derive from disability due to pain: compensation claim rates for LBP in the USA are high (1.8% of workers in 1995 for US $ 8.8 billion),[5] whereas the figures differ for NP (excluding whiplash). Rates differ among countries.[6-8] Another point could be the well-described phenomenon that specialists create the burden of disease, while the reverse is not always true. In spine problems, for example, the number of fusions in the USA is related to the concentration of spine surgeons and not to that of the population.[9] Ultimately, perhaps the money factor [10] is a good explanation for research concentration. But if the diseases and patients are there, more attention is surely needed.

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What are the consequences of this situation? First, today an evidence-based approach can hardly be proposed in NP whereas it is possible in LBP [11] (Table I). Moreover, well established principles in LBP, such as the classification in acute (0-30 days), subacute (30-90 days) and chronic (over 90 days) cases,[11-13] is applied *tout court* to NP, even though there are no well established studies or specific consensus on this: it is on analogy, and it could prove totally wrong. Physical therapies in multimodal treatments play a role in NP[3] but not in LBP, where it seems to be more a factor of multiprofessional approach.[1] Manipulation and other manual therapies seem to play a greater role in NP than in LBP,[3] presumably owing to physiological reasons. Moreover, what could be the role of cognitive-behavioural approaches in NP? In our view, it is not possible a good rehabilitation programme without a cognitive-behavioural component (and this seems another plain fact in LBP discovered by not-rehab specialists, as was the "bio-psycho-social syndrome" to define chronic LBP,[13] but glory to researchers while clinicians sleep!). All these considerations could be easily reversed in the future because currently available evidence is lacking. Bed rest for LBP once seemed logical [14-16] until different evidence came out:[17, 18] NP treatment is in the same situation LBP treatment was twenty years ago.

In conclusion, this is a call for research by well trained clinicians and rehabilitation professionals in

TABLE I.—*Usefulness of various types of treatments in neck pain and low back pain according to current evidence.*[1-3]

Treatments	Neck pain	Whiplash			Low back pain	
		A	C	+R	A	C
Education						
Advice to stay active					++	
Back schools					?	+
Early return to normal activity		+				
Patient education	?					
Injection therapy						
Epidural steroids					?	?
Facet joints						-
Local						?
Oral drugs						
Analgesics (paracetamol, opioids)	?	?		?	?	+
Antidepressants	?	?		?		+
Muscle relaxants	?	?		?	±	±
NSAIDs	?	?		?	++	+
Manual therapies						
Massage					?	?
Early mobilisation	+	+				
Spinal manipulation	+				+ (short term)	+
Physical therapies						
Heat or cold	?					
Physical treatments			?			
Pulsed electromagnetic field	?	?				
Spray and stretch	?					
TENS	?				?	?
Traction	?				?	?
Rehabilitation						
Behavioural therapy					?	+
Biofeedback	?				?	?
Exercise	+	?			+	++
Multidisciplinary treatment programmes					+ (SA)	++ (intensive) ± (less intensive)
Multimodal treatments	?	?	?			
Other treatments						
Acupuncture	?				?	+
Bed rest					-	
Lumbar supports					?	?
Soft collar and pillows	?					
Surgery			?	?		

A: acute; SA: subacute; C: chronic; +R: with radiculopathy; NSAIDs: nonsteroidal anti-inflammatory drugs; TENS: transcutaneous electrical nervous stimulation. ++ beneficial; + likely to be beneficial; ± trade-off between benefit and harm; - likely to be harmful; -- harmful; ? unknown effectiveness.

TABLE II.—*Clinical papers published on Medline each year about neck pain and back pain. Search performed in February 2007 introducing "neck pain" and "back pain" as free terms and using limits for "year" and "clinical trial".*

Year	Neck pain Total		Back pain Total	
	N.	%	N.	%
1990	4	9	38	91
1995	4	6	63	94
2000	22	16	110	84
2005	59	18	264	82

%: percentage of the total of neck and back pain papers published in the given year.

NP. If the neck is not the back, clinical behaviours should be different, but we need evidence for the 5 Ws: who, what, where, when and why, but also how.

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