CORRESPONDENCE

Acute Lumbar Back Pain—Investigation, Differential Diagnosis and Treatment

by Prof. D.r med. Hans-Raimund Casser, Dr. med. Susann Seddigh, and Prof. Dr. med. Michael Rauschmann in issue 13/2016

Clear Diagnosis and Therapy Are Possible

The authors assume that there exists something called "unspecific" back pain, the causes of which are all but unidentifiable (1). If there is any such thing at all as back pain with no somatic basis, it is caused by somatoform or other mental disturbances and is therefore not unspecific. However, diagnostic and therapeutic nihilism should have been finally laid to rest since the publication of DePalma's 2015 article (2), if not before.

Appropriate diagnostic tools reveal a breakdown approximately as follows: circa 40% of back pain is discogenic, 30% is caused by facet joint problems, and 20% by the sacroiliac joint.

Large case numbers (3) confirm the validity of the methods used, and even problem cases such as postspondylodesis syndromes can be assigned a diagnosis (4). In other words, clear diagnosis and therapy are very much possible.

I also find the periods used to classify pain as acute or subacute substantially too long, considering how swift chronification is. Intervention in such cases can shorten illness considerably, leading to correspondingly significant savings in direct and indirect costs of illness.

Casser et al. also fail to mention prescription of coanalgesics such as antidepressants or anticonvulsants. However, this is a pathophysiologically justified measure and has the side effect of also being able to treat concomitant depression and anxiety.

DOI: 10.3238/arztebl.2016.0562a

REFERENCES

1. Casser HR, Seddigh S, Rauschmann M: Acute lumbar back pain—investigation, differential diagnosis and treatment. Dtsch Arztebl Int 2016; 113: 223–34.
2. DePalma MJ: Diagnostic nihilism toward low back pain: what once was accepted, should no longer be. Pain Med 2015; 16:1453–4.
3. Verrills P, Nowesenitz G, Barnard A: Prevalence and characteristics of discogenic pain in tertiary practice: 223 consecutive cases utilizing lumbar discography. Pain Med 2015; 16: 1490–9.
4. DePalma M, Ketchum JM, Saullo TR: Etiology of chronic low back pain in patients having undergone lumbar fusion. Pain Med 2011; 12: 732–9.

Dr. med. Thomas Bambach
Neumarkt/Oberpfalz, Germany
info@schmerztherapie-bambach.de

Positive Effect of Reduced Activity and Bed Rest

With reference to the National Disease Management Guideline for Low Back Pain, the article on acute, nonspecific lumbar pain (1) states that "[R]estriction of activity, including bed rest, is of no benefit and merely prolongs recovery."

How is it then that, in my 45 years as a primary care physician, my patients with acute lumbago can sleep without pain in a special lateral position (lower leg straight, upper leg bent, upper shoulder pushed back, hand on the upper buttock), which reinforces lumbar lordosis, and can work without pain after three days of evening administration of one diclofenac sodium suppository?

How is it that, when acute lumbar spine pain occurs in the evening after going to bed in supine position, a small, firm cushion placed under the lumbar spine leads to immediate disappearance of low back pain?

DOI: 10.3238/arztebl.2016.0562b

REFERENCES

1. Casser HR, Seddigh S, Rauschmann M: Acute lumbar back pain—investigation, differential diagnosis and treatment. Dtsch Arztebl Int 2016; 113: 223–34.

Dr. med. Dieter Feldmann
Bad Lauterberg im Harz, Germany
dr.feldmann.dieter@t-online.de

A Warning Signal to the Body

I would like to make one critical comment, regarding the important issue of therapy, on the excellent publication (1). The authors refer to the National Disease Management Guideline, saying, "reduced activity and bed rest have been shown to have no effect or to lead to worsening of the pain…"

I would like to ask all interested colleagues which of them have ever suffered severe acute back pain. When confronting this type of pain, one longs for a stepped bed or a lateral quad position, local heat, pain medication, or perhaps even sedation—with the aim, of course, of returning to adapted mobilization swiftly, as soon as the clinical picture permits.

Pain is a warning signal to the body. Acute pain is an important acute warning signal, indicating that a cessation of activities and a period of rest are needed to prevent manifest structural damage. The authors state that 80 to 90% of cases of acute back pain have no clear patho-anatomical correlate, which is certainly important. What I see here is a beginning, acute, functional, segmental neuromuscular compartment syndrome with concomitant local inflammatory processes. If we were to ignore the pain, we would decisively reinforce this spiral of neuromuscular disturbance. What recommendations do we give to a

high-performing competitive athlete who develops increasing acute pain symptoms in the thigh muscles on exertion? To carry on until complex anatomical muscle damage occurs? How do we treat acute functional torticollis? Why do we ignore all basic knowledge of muscular pathophysiology when it comes to the lumbar spine? Because there are guidelines, national or otherwise?

DOI: 10.3238/arztebl.2016.0562c

REFERENCES

1. Casser HR, Seddigh S, Rauschmann M: Acute lumbar back pain—investigation, differential diagnosis and treatment. Dtsch Arztebl Int 2016; 113: 223–34.

Dr. med. Roland Roth
Essen, Germany
dr-roland-roth@t-online.de

Back Pain as a Signal That Something Needs to Change

On the basis of the suffering seen in the daily practice of the orthopedic surgeon, I believe it is important to expand and summarize by once again placing particular emphasis on the following points:

Acute unspecific back pain is a bothersome but harmless everyday problem with a good prognosis for self-limitation. In the first instance it does not require any specialized medical diagnosis or treatment. Provided red flags have been ruled out, clinical examination and initial treatment by a primary care physician are sufficient for the first 3 to 6 weeks.

For initial treatment, neither cortisone or other injections, nor deep lumbar infiltrations, nor massages or similar are indicated, even if they are readily demanded by patients and their "advisers." Given the high spontaneous cure rate of the complaints, I find lavish, expensive IGeL items for the treatment of acute unspecific back pain dubious. Simple back taping does the same job as expensive machines.

Unspecific back pain that recurs more frequently should be a sign to patients that something in their lives needs to change. This generally means more exercise and less stress. Unfortunately, patients have to do this themselves and break out of their comfort zone and dysfunctional behavioral patterns. Regrettably, when advising their patients in this regard, not all physicians follow guidelines.

I would very much welcome it if other opinion-formers, such as health insurers, schools, employers, consumer advice centers, etc., made even greater efforts towards preventing these problems.

DOI: 10.3238/arztebl.2016.0563a

REFERENCES

1. Casser HR, Seddigh S, Rauschmann M: Acute lumbar back pain—investigation, differential diagnosis and treatment. Dtsch Arztebl Int 2016; 113: 223–34.

Dr. med. Michael Schneider
Eppingen, Germany
info@op-eppingen.de

In Reply:

As we expected, most comments are critical of the classification of back pain as either "specific" or "nonspecific" stated in the National Disease Management Guideline for Low Back Pain. It should be noted that as the opposite of the term "specific" we prefer the term "nonspecific" back pain, as "unspecific" is inappropriate from a purely linguistic point of view.

Regarding the very understandable observations made by Dr. Bambach, it should be noted that "nonspecific" by no means denotes "low back pain with no somatic basis" and does not lead to "diagnostic and therapeutic nihilism."

The umbrella term "nonspecific back pain" does not rule out investigation of the functional disturbances generally found in such cases, just as it does not indicate an appropriate treatment. However, instrumental diagnosis that goes beyond physical examination and invasive therapy should be avoided unless there is evidence of a patho-anatomical correlate. For example, MRI examinations with descriptive findings on initial contact with back pain patients, sometimes performed as screening, lead to irrelevant diagnoses and the beginning of invasive therapy.

Restraint when diagnosing will certainly not delay the recognition of "chronification," but rather will tend to avoid it. For example, inopportune attribution of pain to irrelevant imaging findings is caused by demonstrating findings to the patient. There is no basis in either the literature (3, 4) or our experience for attributing back complaints with certainty to questionable disease entities such as "discogenic low back pain" on the basis of differentiated diagnostic procedures, e.g. discography, as promoted by the cited Bogduk research group (1, 2). *eTable 1* and *eTable 4* of our article contain summaries of physical findings with no clear patho-anatomical significance and of specific types of back pain requiring further diagnostic evaluation; for reasons of space we were obliged to display these online. The *sine qua non* of successful handling of common functional disturbances seen in nonspecific back pain are a meticulously taken pain history and competent manual diagnostic or other physical examination.

The algorithm for acute back pain management contains a summary of psychosocial risk factors for chronification ("yellow flags"); it is recommended that, if pain persists despite 6 weeks of treatment in conformity with the guidelines, patients should undergo prompt interdisciplinary assessment, i.e. including assessment by a psychotherapist. Depending on the findings of this assessment, targeted treatment ranging up to an interdisciplinary multimodal pain treatment program may be begun. The coanalgesics mentioned, such as antidepressants or anticonvulsants, may also be used, but these must under no circumstances be used as primary pharmacological treatment.

One further, frequently discussed point is the evidence-based recommendation not to implement reduced activity and bed rest for nonspecific back pain.

The context of this recommendation is the experience that fear and anxiety lead many patients to follow to the letter the well-intended advice to reduce activity and avoid exercise, thinking that resuming activities will cause further damage. In other words, the behavior appropriate to red flags is often extrapolated to non-specific back pain. This leads to pain-avoidant behavior, a significant factor in chronification. This does not mean that relief of strain, heat, and limitation of activities must not be recommended in the short term—i.e. a few hours to a few days—if there is severe pain and major tension, as Dr. Feldmann reminds us; however, if these measures are taken, the patient must be informed that the functional disturbance is reversible and that prolonged immobilization has adverse consequences. With this individual, patient-oriented procedure, the experience of the primary treating physician certainly also plays a role in evaluating functional disturbance and the patient's personality.

The same applies to the predominant muscular causes of back pain (accounting for approximately 80% of cases) discussed by Dr. Roth, which we described in detail in our article when discussing functional disturbances. Back pain caused by muscle complaints resulting from trauma is specific, as there is a clear cause on the basis of clinical history, clinical findings, and patho-anatomy, and specific treatment is indicated.

Dr. Schneider provides a good summary; in addition, we would like to state that such a complex, frequently recurring common complaint as back pain requires both prompt and lasting assessment and treatment in line with patients' problems and needs, from initial treatment onwards. Less is often more in this regard.

DOI: 10.3238/arztebl.2016.0563b

REFERENCES

1. DePalma MJ: Diagnostic Nihilism toward low back pain: What once was accepted, should no longer be. Pain Medicine 2015; 16: 1453–4.
2. Verrills P, Nowesenitz G, Bernard A: Prevalence and characteristics of discogenic pain in tertiary practice: 223 consecutive cases utilizing lumbar discography. Pain Medicine 2015; 16: 1490–9.
3. Carragee EJ, Lincoln T, Parmar VS, et al.: A gold standard evaluation of the „discogenic pain" diagnosis as determined by provocative discography. Spine 2006; 31: 2115–23.
4. Chou R, Qaseem A, Snow V, et al.: Clinical Efficacy Assessment Subcommittee of the American College of Physicians; American Pain Society Low Back Pain Guidelines Panel. Diagnosis and treatment of low back pain: a joint clinical practice guideline from the American College of Physicians and the American Pain Society. Ann Intern Med 2007; 147: 478–91.
5. Casser HR, Seddigh S, Rauschmann M: Acute lumbar back pain—investigation, differential diagnosis and treatment. Dtsch Arztebl Int 2016; 113: 223–34.

On behalf of the authors:
Prof. Dr. med. Hans-Raimund Casser
DRK Schmerz-Zentrum Mainz, Germany
hans-raimund.casser@drk-schmerz-zentrum.de

Conflict of interest statement
The authors of all contributions declare that no conflict of interest exists.