

CORRESPONDENCE

Degenerative Lumbar Spinal Stenosis in Older People—Current Treatment Options

by Prof. Dr. med. Rolf Kalff, PD Dr. med. habil. Christian Ewald, Dr. med. Albrecht Waschke, Dr. med. Lars Gobisch, Prof. Dr. med. Christof Hopf in volume 37/2013

Further Aspects of the Therapeutic Options

The article (1) provides a good overview of the treatment options in lumbar spinal stenosis. However, crucial aspects were not mentioned: many patients are treated with complex surgery if imaging shows spinal stenosis when what they actually have is local back pain, not spinal claudication.

While some treatments are superior to others in some partial aspects (different surgical techniques, conservative treatment), “superior” does not actually give any indication about the actual degree of improvement—especially as far as walking performance is concerned, which is the main criterion for impairment (the defining criterion of spinal stenosis, as diagnosed by means of imaging modalities, is spinal claudication). Being able to walk without leg pain for a distance of 100 meters before surgery and of 500 meters after surgery is a notable improvement statistically, but clinically and in absolute terms a rather negligible one. It may be assumed that this is not sufficiently explained to patients in the preoperative discussion. The meta-analysis by Kovacs et al (2) on the treatment of spinal canal stenosis—which was not mentioned by the authors—included 739 publications on the subject. The authors of this study mentioned this (“In all the studies, surgery showed better results for pain, disability, and quality of life, although not for walking” [2]). The psychological comorbidity of these often multimorbid patients has been less thoroughly investigated than their imaging results. But for the purposes of rehabilitation, it is of crucial importance, therapeutically and prognostically, to know whether depression and/or anxiety (e.g. fear of movement) are present.

A critical explanation of further aspects of these therapeutic options would have benefited this CME article, especially in terms of a better understanding among general practitioners and health services researchers.

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REFERENCES

1. Kalff R, Ewald C, Waschke A, Gobisch L, Hopf C: Degenerative lumbar spinal stenosis in older people—current treatment options. *Dtsch Arztebl Int* 2013; 110(37): 613–24.
2. Kovacs FM, Urrútia G, Alarcón JD: Surgery versus conservative treatment for symptomatic lumbar spinal stenosis: a systematic review of randomized controlled trials. *Spine* 2011; 36: E1335–51.
3. Adogwa O, Parker SL, Shau DN, et al.: Preoperative Zung Depression Scale predicts outcome after revision lumbar surgery for adjacent segment disease, recurrent stenosis, and pseudarthrosis. *Spine J* 2012; 12: 179–85.
4. Guilfoyle MR, Seeley H, Laing RJ: The Short Form 36 health survey in spine disease—validation against condition-specific measures. *Br J Neurosurg* 2009; 23: 401–5.

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Methods Need to Be Adapted to Problems

I have several comments regarding the informative review article. When eliciting information about the symptoms associated with intermittent claudication and the obvious question of vascular or spinal pathogenesis, patients with arterial occlusive disease usually report that their symptoms disappear within minutes when they rest. Those with spinal claudication, by contrast, report a slow disappearance of their pain and the associated, diffusely described weakness in the legs.

The physical examination after the complete description of symptoms will lead to a clinical diagnosis of lumbar spinal stenosis, or the exclusion thereof. When using radiological criteria, however (1): “The term, standing alone, is a morphological description of imaging findings (anteroposterior [AP] diameter by computed tomography [CT] of less than 10 mm); it has no pathological significance in itself”), the cart is put before the horse.

Among the pathogenically relevant, empirically common factors, Kalff and coauthors did not include obesity, especially where it causes hyperlordosis of the lumbar spine. According to many studies in recent decades, however, obesity is not only a risk factor for internal medical complications but also for pain in the lower half of the body—starting with the lumbar spine, hips, knees, ankles, and feet (2–4).

Once multimorbidity and increased individuality—common in older age—are included especially in older patients then the authors’ conclusion, that “no evidence-based recommendation on the diagnosis and treatment of lumbar spinal stenosis in older people can be formulated at present because of the lack of pertinent randomized trials,” is not surprising—especially since such studies are not conducted in patients who might disrupt the smooth running of a randomized trial. Perhaps we should return to a recommendation from the times of Hippocrates of Kos (460–370 BC) and Aristotle (384–322 BC), that the methods have to be appropriate in view of the problems—and do not have to follow mechanistic algorithms.

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REFERENCES

1. Kalff R, Ewald C, Waschke A, Gobisch L, Hopf C: Degenerative lumbar spinal stenosis in older people—current treatment options. *Dtsch Arztebl Int* 2013; 110(37): 613–24.
2. Benecke A, Vogel H: Übergewicht und Adipositas. Gesundheitsberichterstattung des Bundes. Berlin: Robert Koch-Institut 2003; 16: 17.
3. McGoey BV, Deitel M, Saplys RJ, Kliiman ME: Effect of weight loss on musculoskeletal pain in the morbidly obese. *J Bone Joint Surg Br* 1990; 72: 322–3.
4. Pelton M, Lindroos AK, Torgerson JS: Muskuloskeletale pain in the obese: a comparison with a general population and long-term changes after conventional and surgical obesity treatment. *Pain* 2003; 104: 549–57.

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In Reply:

The difficulties in evaluating the indication, diagnostics, and treatment and assessing the therapeutic success after treating lumbar spinal stenosis in older patients were emphasized once more at the end of our article (1). The correspondence from Schiltewolf and Wörz also describes the complexity of the problem and fits in seamlessly with our explanations. In our CME article, we mostly gave space to the aspects relating to the symptoms. The psychological comorbidities of older patients and their influence on the results of any medical treatment constitute important aspects that concern not only the treatment of spinal stenosis but also other therapeutic approaches. A more detailed explanation would have exceeded the word limit of our article and was therefore not undertaken.

With regard to Wörz's correspondence, we wish to point out that the medical history and clinical examination—as formulated in our article—are clearly the first steps and lead to the diagnosis of neurogenic claudication. The diagnosis of spinal stenosis does, however, require confirmation by imaging methods. Early on in our article, we explained the lack of correlation between imaging results and clinical diagnoses as a function of the wide range of radiological findings with generally low interobserver reliability.

Especially the absence of validated and guideline supported treatment pathways in the therapy of lumbar spinal stenosis requires the initiation of steps in this direction. A differentiated

reflection, especially of the treatment result, is useful and important. Appropriate scoring systems (for example, SF 36/Oswestry Disability Index) exist and allow—within limitations—a reproducible and objectifiable assessment of the disease course. The registry of the German Spine Society (*Deutsche Wirbelsäulengesellschaft*, DWG), introduced two years ago, is a nationwide platform and provides an obvious option for the collection of disease course data and for describing the importance of different approaches. On a voluntary basis, data on the validity of therapeutic approaches are collected, also under the aspect of future quality management. A further continuing, scientifically funded workup of the problem will result in increased safety and an even higher degree of individualized therapy and therefore the avoidance of unnecessary interventions.

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REFERENCES

1. Kaff R, Ewald C, Waschke A, Gobisch L, Hopf C: Degenerative lumbar spinal stenosis in older people—Current treatment options. *Dtsch Arztebl Int* 2013; 110(37): 613–24.

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Conflict of interest statement

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