Care | Low pain back

Céline Bouton¹, Cyril Bègue², Audrey Petit³⁻⁴, Natacha Fouquet³⁻⁵, Thibaut Py², Jean-François Huez², Aline Ramond-Roquin^{2,3,6}.

- 1. Département de médecine générale, université de Nantes.
- Département de médecine générale, université d'Angers.
- INSERM, U1085, IRSET, équipe ESTER, Université d'Angers, Angers.
- 4. Centre de consultation de pathologie professionnelle du CHU d'Angers, Angers.
- 5. Santé publique France, Saint -Maurice.
- Département de médecine de famille et de médecine d'urgence, Université de Sherbrooke, Québec, Canada.

celinebouton@yahoo.fr exercer 2018;139:28-37. Managing a patient with low back pain in general practice

INTRODUCTION

Definition and prevalence

The prevalence of common low back pain (**Sidebar 1**) is very high, in the industrialized countries as well as elsewhere in the world^{1,2}. Over 50% of French persons aged 30 to 54 years suffer from low back pain each year³, as does one person out of four each month throughout the world⁴.

Low back pain in a biopsychosocial perspective

Low back pain often entails functional disability and is at times associated with psychosocial difficulties (psychological distress, deterioration of family relationships, limitation of social activities, inability to work, lower quality of life...). These difficulties are more pronouncedly expressed when low back pain becomes chronic, and they more frequently occur in older persons¹. Low back pain also has a considerable impact in work environments and generates major social costs, some of them direct (health care consumption), and others indirect (per diem sick pay, disability benefits, loss of productivity...)

Risk factors and natural history

Low back pain is not an illness or disease, but rather asymptom possibly originating in

the spinal or perispinal structures and spaces⁶. Its origins are multifactorial, and the biopsychosocial model of low back pain explains how it is that socio-demographic, biomechanical, medical, occupational and psychosocial factors can all contribute to its development⁷. While the prognosis for low back pain has for many years been considered as highly favorable, likelihood of improvement is markedly reduced when it persists for more than six weeks⁸, and recurrence is quite frequent¹. Following an episode of acute low back pain, one person out of three still presents symptoms one year later⁹. In each patient, it is important to detect and gather information on the issues that are his or hers, even though it may be difficult to distinguish etiological from prognostic factors. While biomechanical factors have a major impact on the occurrence of low back pain, a number of psychosocial factors (psychological difficulties, fearavoidance beliefs and behavior, problematical professional а context or insufficient family and social support) are liable to favor its persistence or exacer-bate its impact¹, ¹⁰⁻¹³.

Common low back pain and the general practitioner

Along with physiotherapists, general practitioners (GP) are

the health care professionals most frequently consulted by these patients¹⁴. In France, 7% of GP consultations of persons aged 18 to 65 years involve low back pain complaints¹⁵. Moreover, a GP is likely to be familiar with his patients' familial, social and professional environment, and comprehensive care and a patient-centered approach are two of his key skill sets16. That is why, from a biopsychosocial standpoint, a GP is ideally positioned to treat low back patients. However, management of this condition often yields frustration, particularly in cases of chronic low back pain. Some GPs attribute their frustration to diagnostic uncertainty or to their doubts concerning treatment effectiveness¹⁷. Others mention recommendations that may not be suited to the peculiarities of their patients' situations¹⁸.

This article is aimed at presenting a reasoned assessment of solid evidence on low back pain in general practice and of complementary proposals stemming from clinical expertise and from the research carried out by a multidisciplinary group of clinician-researchers essentially involved in primary care. The literature on common low back pain is extremely profuse. Our references have preferentially to do with ever more numerous studies dedicated to primary care. Two articles synthesizing existing recommendations in primary care for common low back pain patients are of particular interest with regard to evidence-informed management^{19,20}.

Medical evaluation has two main objectives; first, to

Low back pain: Pain or discomfort localized beneath the 12th dorsal vertebra and above the intergluteal fold, with possible radiation down the leg, but not continuing below the knee.

Common low back pain: Low back pain that is not secondary to a specific pathology (infection, tumor, osteoporosis, fracture, ankylosing spondylitis, inflammatory process) and that is not accompanied by signs of nerve compression (nerve root syndrome or cauda equina syndrome).

Acute low back pain: low back pain developing for fewer than 6 weeks.

Subacute low back pain: low back pain developing for 6 to 12 weeks.

Chronic low back pain: low back pain developing for more than 12 weeks.

The term "recurrent low back pain" can be used for acute or subacute episodes, but there exists no consensus allowing for definition of the notion in terms of frequency or number of episodes; furthermore, this notion in no modifies the treatment and management proposed for the above definitions.

Sidebar 1: Low back pain definitions (Based on Van Tulder et al.5 and Balague et al^1 .)

confirm a diagnosis of common lower back pain; second, to identify potential obstacles to favorable evolution.

Confirmation of a common low back pain diagnosis

Diagnosis of common low back pain is based mainly on targeted questioning and clinical testing, which will reveal different degrees of mechanical low back pain reproduced on palpation, muscular stiffening and tightness during mobilization of the spine^{20,21}. This diagnosis necessarily rules out the following diagnoses:

- pain exterior to the spine: renal, retroperitoneal, vascular, sacral or sacroiliac pathologies, of which the description remains outside the scope of this article;

- specific (or secondary or non -degenerative) low back pain: of infectious, tumoral, fractural or inflammatory origin. Certain clinical signs, known as red flags (Sidebar 2) can point to specific low back pain and should be sought out at an early stage in any patient consulting on account of low back pain.

However, the above list of red flags is not an object of consensus, and their actual capacity to predict the existence of specific low back pain is $unknown^{24}$. In point of fact, specific low back pain represents less than 2% of the low back pain encountered in primary care, even though, in this context, more than 80% of patients

Immunosuppression, HIV

plained weight loss

Osteoporosis

Extended

syndrome)

Altered overall condition, unex-

drome (including cauda equina

Persistence while receiving

Unexplained fever > 38° C

treatment > 4-6 weeks

neurological

Initial	episode	occurrin	g after		
50 years of age					
Recent, violent trauma					
Dorma	nont no	in mark	od by		

- ermanent markeu circadian rhythms
- Chest pain
- Past history of malignant tumor (s)
- Prolonged corticosteroid therapy
- Intravenous drug use

Sidebar 2: Low back pain definitions (Based on Van Tulder et al.5 and Balague et al¹.)

> exercer # 139 - Janvier 2018

syn-

present at least one red flag²⁵. Work remains to be done, especially in primary care, in order to determine which clinical signs (or combinations of signs) should be given priority consideration 26,27 . In the meantime, and given the potential severity of specific low back pains, it would appear permissible to search for red flags (strong recommendation, moderate level of evidence) and to envision additional tests and/or to request expert advice according to the suspected diagnosis or diagnoses (strong recommendation, low level of evidence;

-low back pain associated with root compression syndrome: lombosciatic, lombocruralgic or cauda equina syndrome.

Painful irradiation of a lower limb (especially if it extends below the knee) and sensorimotor disorders are alarm signals that should occasion immediate neurological assessment. Hyperalgesia (pain resisting major analgesics >24h) or paralysis (motor deficit preventing reaction to leg heaviness) are indications for specific and urgent medical attention²¹.

A rare occurrence, cauda equina syndrome associates root compression syndrome with multiple nerve root lesion. It should nonetheless be suspected when, to different and varying degrees, clinical presentation associates radicular pains, sensorimotor disorders (of which the most characteristic is saddle block anesthesia), reduced reflexes, and genito-sphincter dysfunctions. This type of condition may call for emergency neurosurgery²¹.

In the other cases, even though root compression syndrome is associated with slow resolution of low back pain, treatment should be similar to that administered for common low back pain; in some instances, monitoring the evolution of the symptoms and neurological signs will suffice²⁸. Root compression syndrome persisting for more than 4 to 6 weeks may justify MRI or a surgical opinion (strong recommendation, moderate level of evidence).

At times characterized as "triage", this type of evaluation has got to be carried out as soon as the initial consultation, whatever low back pain duration may be. It must be repeated so as to avoid disregarding or misidentifying the secondary appearance of neurological disorders or initially hard-to -diagnose specific low back pain. This is particularly the case with inflammatory low back pain such as ankylosing spondylitis, in which persistent symptoms constitute a diagnostic argument²².

A common low back pain diagnosis does not necessarily require additional investigation during the acute phase^{5,21,23,28} (strong recommendation, moderate level of evidence). Standard radiography and MRI are recommended if, after 4 to 8 weeks, there is no clinical improvement, in the event of major repercussions and/or in cases where invasive treatment (infiltration, surgery) is envisioned as an option^{21,23,29} (strong recommendation, moderate level of evidence). It is aimed at formally ruling out specific low back pain and/or providing orientation for invasive treatment. Given that correlation between an overall clinical picture and the presence of imaging abnormalities is very low, imagery results are not instrumental to the orientation of treatment for common low back pain patients³⁰. It is consequently essential, before testing, to inform patients of the goal under pursuit; after all, imaging abnormalities such as degenerative disc disease

(DDD) are frequently found, yet have little or no effect on treatment³¹. Last but not least, it is of no interest, in the absence of peculiar evolution or perspective of invasive treatment, to proceed time and again with diagnostic imaging²⁹.

IDENTIFICATION OF POTENTIAL OBSTACLES TO FAVORABLE EVO-LUTION

Risk factors for unfavorable evolution

A sizable number of clinical, biomechanical and psychosocial factors have been associated with unfavorable evolution of a low back pain episode (Sidebar 3), whether it be in terms of duration (chronic evolution) or, more pointedly, in terms of functional and psychosocial impact. Psychosocial factors appear to be preponderant 7,10 $^{12,20,21,28,32-36}$. In point of fact, the level of pain and physical impact objectifiable on testing seem less determinative of future development than the way in which a patient experiences, interprets and adapts to his situation. In a cognitivebehavioral perspective, some authors have described a transition towards disabling chronic low back pain as a vicious circle in which pain provokes fear, avoidance and "doom and gloom", leading to physical deconditioning, which tends to favor the persistence of pain and incapacitation^{37,38}. Just like the previously described red flags, psychosocial risk factors are at times grouped under yellow flags (individual factors), blue flags (professional and black factors) flags (contextual factors)³⁹.

Assessing the risk of unfavorable evolution

Numerous tools have been

elaborated in view of assessing the prognosis of a patient presenting with acute low back $pain^{31,40}$. It is difficult at an early stage to model a prognosis for a given individual when taking into account only a limited number of factors 32 . More often than not, multiple factors interact with one another and affect low back pain evolution in configurations that may vary enormously, from one individual to the next²⁸. Multidimensional questionnaires such as the Acute Low Back Pain Questionnaire and the Orebro Musculoskeletal Pain Screening Questionnaire, both of which take into account a wide range of risk factors, seem particularly effective in prognosis prediction^{20,28,40}. However, their means of application and usefulness outside of research protocols has not become an object of consensus. Moreover, it has been demonstrated that subjective estimation of prognosis by a health care professional fully acquainted with the patient, or even by the patient himself, can be strongly associated with prognosis, and is finally as reliable as the commonly used multidimensional questionnaires^{32,41}. In anv event, a prognosis estimated as unfavorable should act as an alarm bell, impelling the physician to look into potential obstacles to the patient's clinical improvement and, if necessary, to intervene as he deems suitable.

Identifying potential obstacles to favorable evolution

Obstacle identification is a key part of assessment, as it may quite possibly orient treatment and management²⁸. With this in mind, the subacute period seems to represent a determinative stage for evolution of a common low back pain episode and consequently to perhaps be the right time to explore potential obstacles to clinical improvement28,31. Such exploration has essentially to do with the previously described risk factors, particularly the individual, professional and psychosocial factors related to an overall context to the patient's interpersonal environment (strong recommendation, moderate level of evidence). In keeping with a GP's monitoring skills16, exploration must be progressive and may at times be based on the his previous acquaintance with the patient, all relevant aspects of whose profile are nonetheless likely to necessitate (re)interrogation.

That much said, exploration will be facilitated by a highquality relationship epitomizing the global, patient-centered approach in which the patient's degree of willingness to be questioned on elements of his private, if not intimate life is scrupulously respected. At the outset of the episode, this type of exploration may appear cursory, but when the low back pain proves persistent, it needs to be deepened²⁸. Concretely speaking, when the symptoms persist, especially during the acute and subacute phases, discussion with the patient should take place at regular intervals, for example every week or two.

Clinical factors: advanced age, past history of low back pain, lengthy episode duration, pain intensity, extended pain without neurological sign, major incapacitation, poor overall state of health, low estimate of quality of life.

Biomechanical factors: physical labor (examples: regular bending over, apron or forklift driving, carrying heavy loads).

Psychosocial factors:

Individual

- cognitive-behavioral: passive coping strategies (avoidance behavior, "gloom and doom" or disaster-mongering*...), external causal attribution**, mistaken beliefs on the cause or the factors exacerbating low back pain, pessimism regarding prognosis, negative perception of the treatment strategy proposed;
- psychological or psychiatric: psychological distress, somatoform or somatic symptom disorder, depression, personality disorder (paranoia, borderline...)

professional: lack of support from colleagues or hierarchical superiors, lack of protection on return from work, low level of workaday satisfaction, work deemed monotonous or excessively demanding, on-the-job stress, unsociable hours (shift work);

social or familial: poor community/neighborhood support or social isolation, overprotective family or, on the contrary, lack of family support; *contextual*:

- obstacle associated with the professional environment: Regulatory impediment to return to work, no possibility of adapting the workplace or work station, legal dispute with the employer and/or litigation associated with financial compensation for sick leave, past history of negative experience concerning return to work following a period of absence;
- obstacle associated with the health care system: management unfavorable to pursuit of usual activities, discordant discourses or treatment modalities put forward or advocated by health care professionals.

* exaggeratedly negative mental reaction occurring during a pain episode and responsible for mistaken thoughts, fears and unsuitable or inappropriate interpretations liable to aggravate the physical pain ** attributing responsibility for one's pain to factors independent of one's person

** attributing responsibility for one's pain to factors independent of one's person (examples: the workplace environment, the health care system...).

Sidebar 3: Risk factors for unfavorable evolution of an episode of common low back pain

Acute low back pain	Subacute low back pain	Chronic low back pain
 Reassurance, Advice to remain active, Early return to work 	 Reassurance, Advice to remain active, Early return to work, Strategy addressing psychosocial factors, Active physiotherapy, Multidisciplinary rehabilitation programs 	 Reassurance, Advice to remain active, Early return to work, Strategy addressing psychosocial factors, Multidisciplinary rehabilitation programs, Cognitive-behavioral therapy

<u>Table 1</u>: Management orientations to be proposed (strong recommendations, high level of evidence)

Acute low back pain	Subacute low back pain	Chronic low back pain
 Strict prolonged bed rest, Tractions, Corticosteroid infiltrations in the absence of nerve root pain, Corticosteroids administered orally or by intramuscular route 	 Strict prolonged bed rest, Tractions, Corticosteroid infiltrations in the absence of nerve root pain 	• Strict prolonged bed rest

Table 2: Management orientations to be avoided (strong recommendations, high level of evidence)

TREATMENT IN GEN-ERAL PRACTICE OF A PATIENT PRESENTING WITH COMMON LOW BACK PAIN

General management principles to be applied at all stages

In a majority of common low back pain episodes, recovery spontaneously occurs within a few weeks. Twelve weeks after its onset, 58% of patients no longer suffer pain, and 73% have fully recovered from their temporary incapacitation⁹. Given this natural evolution, a large portion of management consists in reassuring the patient and, more specifically, in informing him on the likelihood of progressive (if occasionally lengthy and laborious) improvement, whatever the therapeutic regimen proposed and applied. Existing medical resources are relatively sparse, and scant proof of their efficacy presently exists. Brief educative remarks insisting on the importance of remaining active are indispensable, and inordinate bed rest is to be proscribed (high level of evidence)^{1,20}. A biomechanical model according to which the pain results mainly from anatomical abnormalities and mechanical constraints is to be avoided and replaced by a approach more functional and less liable to occasion fears and anxiety. It is of paramount importance that the patient's usual activities be pursued to the extent that they remain tolerable, and he or she should be emphatically encouraged to engage in exercises of gradually increasing intensity: walking, all kinds of physical activity (there exists no proof that one "workout" is of more interest than another). The earliest possible return to work should be envisaged, as soon as reduced pain and diminished functional discomfort render it advisable. The treatments to be prescribed or proscribed are described in **Tables 1 and 2**.

Above and beyond detection and identification for prognostic purposes of a number of psychosocial factors, it is recommended to attempt management of those that are modifiable, and to do so during the acute/subacute phase in anticipation of possible "chronification" 20 . It is consequently of primordial importance not just to take into full account a patient's symptoms, but also to allow him to evoke the difficulties he is susceptible to encounter from a familial, relational, social, professional or psychoemotional standpoint. The optimal ways of managing these diversified psychosocial factors remain to be determined⁴⁴.

Management without medicinal treatment

Present-day recommendations emphasize that from the get-go, management without medicinal treatment be offered as an option; notwithstanding occasionally low levels of proof, its innocuousness is patent. Unfortunately, recommendations in France of alternatives to drugs are conditioned by the fact that a substantial number of them are non-reimbursable.

Active physical therapy

It is recommended following a few weeks of evolution, as soon as reduction of initial pain allows. While it is also recommended in cases of chronic low back pain, its long-term interest remains uncertain. There exists no proof that one rehabilitation technique is superior to another, and whatever the particularities of a given case, the physiotherapist must propose sequences of mobilization, targeted muscle reinforcement, relaxation and proprioception exercises^{20,42-43}.

Massages, balneotherapy, heat applications and ultrasound

While they may all be proposed, no proof of their effectiveness at any stage of low back pain has been provided^{1,20,42,43}.

Spinal manipulation and manual methods

When carried out by a trained practitioner or in the absence of neurological deficit, they have short-term analgesic effectiveness, and can be offered as options during the acute/ subacute stage. While they are not of conclusively proven effectiveness in cases of chronic pain, they are at times proposed due to their relative innocuousness (professional agreement)^{1,20,42,43}.

Acupuncture

While it has shown only low effectiveness during the acute or subacute stages, it is with a high level of evidence that it can be recommended during the chronic stage^{1,20,43}.

Lumbar belts, orthopedic insoles and transcutaneous neural stimulation

They are of no interest during the acute stage. After 4 weeks of evolution they may be used, but current data do not allow us to consider them as effective^{20,42,43}.

Cognitive-behavioral techniques

They are recommended during the chronic phase as a means of helping the patient to regain confidence in the functioning of his back, to become increasingly motivated in management of his low back pain and, more generally, an active participant in his health regime. They must be accompanied by suitably tailored, global management^{1,20,42,43}.

Multidisciplinary treatments

In the subacute and chronic phases, they include intensive rehabilitation, often in "peer groups", as well as global management. Even though these programs are of low proven effectiveness and are likely, in practice, to be less than fully accessible²³, they represent an option. And the more a patient is deconditioned (decreased physical activity...), the higher the likelihood that they will "work". Some "back schools" evolving in a professional environment have shown moderate short-term and medium-term effectiveness in chronic patients^{20,42-43}

Thermal cures

While they may be offered as an option during the chronic phase, their effectiveness has yet to be proven²⁰.

Surgery

There exists no surgery indication for cases of common low back pain; in point of fact, indications for surgery are relevant only in rare cases of deficient or hyperalgesic lumbar radiculopathy and certain cases of incapacitating lumbar radiculopathy persisting for more than 4 to 6 weeks^{1,20,42}.

Tractions

They are to be ruled out, especially in the acute and subacute phases (high level of evidence)^{20,42,43}.

Management with medicinal treatment

Analgesics

Even though there is little proof of the effectiveness of analgesics in treatment of low back pain, their prescription is recommended. In the acute phase, the objective when prescribing them is allow the patient to recover normal functioning as rapidly as possible. Prescription strategy must take into account their side effects, consequently privileging parace -tamol as first-line treatment, nonsteroidal anti-inflammatory drugs as second-line treatment, and grade II or grade III analgesics as third-line treat-ment 1,20,27,43 . While the data pertaining to paracetamol are contradictory⁴⁵, its risk-benefit ratio remains favorable to prescription. Due to risks of addiction, American recommendations have recently proscribed morphine derivatives (grade III) in lower back pain treatment. If they are nonetheless proposed, they must be limited to situations not falling within those requiring first-line treatment, be prescribed for a limited length of time. Long-acting specialties should be privileged, and their analgesic effectiveness shall be closely monitored^{20,43}.

Antidepressants

During the chronic phase, amitripytline can have a moderately positive effect, but selective serotonin reuptake inhibitors (SSRIs) have yet to be proven effective, and are to be avoided^{20,42}. While some recommendations propose duloxetine as treatment for chronic pain43, there is no marketing authorization in France for this indication, and numerous side effects have been reported⁴².

Other medicinal treatments

There exists no proof of the effectiveness of topical nonsteroidal anti-inflammatory drugs²⁰. Muscle relaxants are occasionally proposed in some recommendations in spite of absence of proof and presence particularities of a given case, the physiotherapist must propose sequences of mobilization, targeted muscle reinforcement, relaxation and proprioception exercises^{20,42-43}.

Massages, balneotherapy, heat applications and ultrasound

While they may all be proposed, no proof of their effectiveness at any stage of low back pain has been provided^{1,20,42,43}.

Spinal manipulation and manual methods

When carried out by a trained practitioner or in the absence of neurological deficit, they have short-term analgesic effectiveness, and can be offered as options during the acute/ subacute stage. While they are not of conclusively proven effectiveness in cases of chronic pain, they are at times proposed due to their relative innocuousness (professional agreement)^{1,20,42,43}.

Acupuncture

While it has shown only low effectiveness during the acute or subacute stages, it is with a high level of evidence that it can be recommended during the chronic stage^{1,20,43}.

Lumbar belts, orthopedic insoles and transcutaneous neural stimulation

They are of no interest during the acute stage. After 4 weeks of evolution they may be used, but current data do not allow us to consider them as effective^{20,42,43}.

Cognitive-behavioral techniques

They are recommended during the chronic phase as a means of helping the patient to regain confidence in the functioning of his back, to become increasingly motivated in management of his low back pain and, more generally, an active participant in his health regime. They must be accompanied by suitably tailored, global management^{1,20,42,43}.

Multidisciplinary treatments

In the subacute and chronic phases, they include intensive rehabilitation, often in "peer groups", as well as global management. Even though these programs are of low proven effectiveness and are likely, in practice, to be less than fully accessible²³, they represent an option. And the more a patient is deconditioned (decreased physical activity...), the higher the likelihood that they will "work". Some "back schools" evolving in a professional environment have shown moderate short-term and medium-term effectiveness in chronic patients^{20,42-43}

Thermal cures

While they may be offered as an option during the chronic phase, their effectiveness has yet to be proven²⁰.

Surgery

There exists no surgery indication for cases of common low back pain; in point of fact, indications for surgery are relevant only in rare cases of deficient or hyperalgesic lumbar radiculopathy and certain cases of incapacitating lumbar radiculopathy persisting for more than 4 to 6 weeks^{1,20,42}.

Tractions

They are to be ruled out, especially in the acute and subacute phases (high level of evidence)^{20,42,43}.

Management with medicinal treatment

Analgesics

Even though there is little proof of the effectiveness of analgesics in treatment of low back pain, their prescription is recommended. In the acute phase, the objective when prescribing them is allow the patient to recover normal functioning as rapidly as possible. Prescription strategy must take into account their side effects, consequently privileging parace -tamol as first-line treatment, nonsteroidal anti-inflammatory drugs as second-line treatment, and grade II or grade III analgesics as third-line treat-ment 1,20,27,43 . While the data pertaining to paracetamol are contradictory⁴⁵, its risk-benefit ratio remains favorable to prescription. Due to risks of addiction, American recommendations have recently proscribed morphine derivatives (grade III) in lower back pain treatment. If they are nonetheless proposed, they must be limited to situations not falling within those requiring first-line treatment, be prescribed for a limited length of time. Long-acting specialties should be privileged, and their analgesic effectiveness shall be closely monitored^{20,43}.

Antidepressants

During the chronic phase, amitripytline can have a moderately positive effect, but selective serotonin reuptake inhibitors (SSRIs) have yet to be proven effective, and are to be avoided^{20,42}. While some recommendations propose duloxetine as treatment for chronic pain43, there is no marketing authorization in France for this indication, and numerous side effects have been reported⁴².

Other medicinal treatments

There exists no proof of the effectiveness of topical nonsteroidal anti-inflammatory drugs²⁰. Muscle relaxants are occasionally proposed in some recommendations in spite of absence of proof and presence

Gerard's story (1)

Gérard is 35 years of age; he lives with his girlfriend and their two daughters in a house they are renovating. For several years, he has been working as a bus driver. Following some heavy lifting, a new episode of low back pain has occurred; over the previous ten years, there had already been four such episodes. His physician prescribes analgesics and a 14-day sick leave.

Low back pain recurs two days after his return to work. The relapse occasions a new sick leave period during which Gérard avoids even minimally strenuous physical effort and accepts nothing more than massages from his physiotherapist.

The doctor's posture (1)

Recurrent low back pain following minimally intense effort impels the physician to advise the patient against exerting any effort at all, and since the recurrence is quite recent, Gérard scrupulously and even excessively complies with these instructions. The complaint persists, the physician asks Gérard about his life, but he has no wish to expound on his travails. While he feels less immobilized than before, the pain remains omnipresent.

Gérard's story (2)

He enjoys his work. He likes to cross through the outlying districts with which he is familiar (he was born there). His evening-nighttime work hours allow him to spend time with his daughters during the day. His relationships with his colleagues and hierarchical superiors are in no way problematic. However, notwithstanding the satisfactory ergonomics of his seat, his driving position is somewhat exposed.

For quite a while, Gérard's relations with his girlfriend have been exceedingly tense. The atmosphere has become so poor that for several months, he has been sleeping on the sitting room couch.

His free time is totally monopolized by the renovation work, which due to his pain is not advancing as quickly as he would have liked, even though it behooves him to increase the house's value to the greatest possible extent, before putting it up for sale.

He now understands that separation with his girlfriend has become inevitable. Gérard is tired and depressed. He sees no way out of the situation. When he's on sick leave, at least he can provide his girlfriend with justification for his inability to overhaul the house.

The doctor's posture (2)

After four weeks of sick leave his physician, who is as attentive as ever to Gérard's pain and functional discomforts, once again asks him to talk about his family situation (he knows that there are problems). While the professional finds him to be in a sad mood, no typical aspects of depressive disorder are recognized. He talks to Gérard about physical deconditioning, listens to him analyze his situation (particularly from a psycho-affective standpoint). Gérard now feels recognized in terms of his mental suffering. He perceives a shift from physical to psychological. While he complains just as much as before, he agrees to go to a swimming pool and initiates active physiotherapy. Ten weeks have gone by; while Gérard continues to feel pain, his spine has regained flexibility. He agrees to return to work, and as he exits the consulting room, he requests the address of a "psy", just in case...

Gérard's story (3)

Six months later, Gérard consults his physician in search of a sporting license. He now inhabits an apartment; his two daughters live with him, one week out of two. He works during daytime hours so as to be available when they are home. The low back pain episode seems forgotten.

The doctor's posture (3)

His physician finds no contraindication to his practicing gymnastics. He asks him about life with his daughters. He notes the disappearance of the low back pain complaint.

Sidebar 4: Providing support for the low back pain patient by adopting a different posture

employees, civil service agents and laborers of both sexes 52 .

In France, multidisciplinary occupational health groups are mandated to contribute to spinal risk prevention through individual medical monitoring of employees and collective actions centered on the workplace environment. Good practice guidelines⁵⁶ emphasize the importance of individual and group information on workaday spinal risk being transmitted at every stage of a preventive approach. Primary prevention is aimed at avoiding low back pain occurrence by reducing work situation constraints through campaigns on working conditions and health promotion. Secondary prevention is aimed at limiting the risk of transition towards chronicity by examining workers with low back pain and seeking out individual psychosocial risk factors favoring this type of evolution. Lastly, tertiary prevention is based on the screening of professional and contextual psychosocial risk factors and aimed at keeping severe chronic low back pain patients employed. Moreover, it may be possible to obtain official recognition for "chronic affections of the lumbar rachis" associated with occupational exposure as occupational diseases; examples include exposure to whole-body vibrations in the workplace and the handling of heavy loads (occupational diseases: Tables 97 and 98). It is of crucial importance that the actions outlined above involve all relevant medico-social professionals and that the worker himself actively participate, particularly during any consultation preceding his re-turn to work⁴⁹.

The majority of workers with low back pain are managed by GPs, and 3 out of 4 under-65 low back pain patients consulting GPs are workers⁵⁷.

Care | Low pain back

For a GP, the interest of communicating with an occupational physician is triple: a) giving him early information on the sick leave, of which the occupational physician is systematically informed only after 3 months; b) informing him of the patient's working conditions; and c) proceeding to an exchange of ideas and proposals: sick leave duration, parttime work for therapeutic reasons, work station adaptation, reorientation⁵⁸. professional These types of exchanges can prove particularly useful during recurrent disease episodes, when low back pain becomes sub-acute and the episodes are likely to continue when the low back pain becomes chronic. Needless to say, the exchanges have got to respect existing legislation pertaining to medical confidentiality. They can be carried on according to several modalities, for example

through mail conveyed by the patient to the occupational physician or by phone, preferably with the patient on hand and subsequent to agreement on the details to be communicated. The GP has also got to inform the patient of his right to request a visit with the occupational physician at any time, whether he be on sick leave (visit preceding return to work) or not (occasional visit).

However, the literature shows that contacts between the two doctors - the GP and the occupational physician - are infrequent, and that their cooperation is usually insufficient⁵ Some of the main obstacles having been reported are: logistical problems, difficulty identifying the occupational physician, inadequate knowledge of the competencies and roles of each, and negative representations (the occupational physicians are viewed as lacking in independence)⁶⁰. And vet.

even though there exists no solid proof of the effectiveness of systematic contacts, exchanges between the two physicians are a necessary condition for satisfactory coordination of actions and harmonization of the words addressed to the worker.

CONCLUSION

Management of a patient presenting with common low back pain is illustrative of global management in general practice. Space for further medical examinations is limited, and proof of the effectiveness of the different medicinal and non -medicinal interventions is weak. It is consequently necessary to cope with uncertainty, to employ a biopsychosocial model and to ensure long-term monitoring in view of understanding the determinants of persistent low back pain and providing more effective support for the patient.

Summary

Low back pain is a common reason for consultation in general practice. It often leads to functional disability and is sometimes associated with psychosocial difficulties. Its origin is multifactorial and the biopsychosocial model explains how socio-demographic, biomechanical, medical, occupational and psychosocial factors have an important role in its evolution. While the prognosis for low back pain is generally favorable, the likelihood of improvement is considerably reduced when low back pain persists for more than 6 weeks. The medical evaluation has two main objectives: first to confirm the diagnosis of common low back pain and second to identify potential obstacles to favorable evolution (clinical, biomechanical and psychosocial factors). The diagnosis of common low back pain usually does not require further investigation in the acute phase. Diagnostic tests are recommended in the absence of clinical improvement after several weeks, in the case of major repercussions and / or when invasive treatment is considered. A large part of the care consists in reassuring the patient and informing him that spontaneous improvement is likely but may be long. Drug resources are poor and evidence of their effectiveness is scarce. Brief education emphasizing the importance of staying active is essential, bed rest is to be avoided. An early return to work should be sought and may require contact with the occupational physician. Active physiotherapy is recommended after a few weeks of evolution, as soon as reduction of the initial pain allows it. Patients with an unfavorable evolution (persistence of symptoms over time) should benefit from regular clinical reassessment, including the exploration of psychosocial factors, and possibly radiological examinations, in order to diagnose a (rare) specific pathology, to adapt care and to accompany the patient over time. → Keywords: low back pain; psychosocial risk; primary health care.

References

1. Balagué F, Mannion AF, Pellisé F, Cedraschi C. Non-specific low back pain. Lancet 2012;379:482-91.

2. Louw QA, Morris LD, Grimmer-Somers K. The prevalence of low back pain in Africa: a systematic review. BMC Musculoskelet Disord 2007;8:105.

3. Gourmelen J, Chastang JF, Ozguler A, Lanoë JL, Ravaud JF, Leclerc A. Frequency of low back pain among men and women aged 30 to 64 years in France. Results of two national surveys. Ann Readapt Med Phys 2007;50:640-4.

4. Hoy D, Bain C, Williams G, et al. A systematic review of the global prevalence of low back pain. Arthritis Rheum 2012;64:2028 -37.

5. van Tulder M, Becker A, Bekkering T, et al. Chapter 3. European guidelines for the management of acute nonspecific low back pain in primary care. Eur Spine

J 2006;15 (Suppl 2):S169-91.

6. Institut national de la santé et de la recherche médicale. Lombalgies en milieu professionnel : Quels facteurs de risque et quelle prévention ? Paris : Les éditions Inserm, 2000.

7. Truchon M. Determinants of chronic disability related to low back pain: towards an integrative biopsychosocial model. Disabil Rehabil 2001;23:758-67.

exercer

8. da C Menezes Costa L, Maher CG, Hancock MJ, McAuley JH, Herbert RD, Costa LOP. The prognosis of acute and persistent low-back pain: a meta-analysis. CMAJ 2012;184:E613-624.Henschke N, Maher CG, Refshauge KM, et al. Prognosis in pa-

tients with recent onset low back pain in Australian primary care: inception cohort study. BMJ 2008;337:a171.

10. Ramond-Roquin Á, Bodin J, Serazin C, et al. Biomechanical constraints remain major risk factors for low back pain. Results from a prospective cohort study in French male employees. Spine J 2015:15:559-69

11. Kent PM, Keating JL. Can we predict poor recovery from recent-onset nonspecific low back pain? A systematic review. Man Ther 2008;13:12-28.

12. Chou R, Shekelle P. Will this patient develop persistent disabling low back pain? JAMA 2010;303:1295-302.

13. Pinheiro MB, Ferreira ML, Refshauge K, et al. Symptoms of depression as a prognostic factor for low back pain: a systematic review. Spine J 2016;16:105-16.

14. Plénet A, Gourmelen J, Chastang JF, Ozguler A, Lanoë JL, Leclerc A. Seeking care for lower back pain in the French population aged from 30 to 69: the results of the 2002-2003 Décennale Santé survey. Ann Phys Rehabil Med 2010;53:224-31, 231-8.

15. Pernollet E, Ramond-Roquin A, Fouquet N, Räber C, Huez J-F, Bouton C. La lombalgie chez les adultes consultant en médecine générale : fréquence, caractéristiques sociodémographiques et résultats de consultation associés. exercer 2014;25:170-2.

16. Compagnon L, Bail P, Huez J, et al. Définitions et descriptions

des compétences en médecine générale. exercer 2013;148-55. 17. Chew-Graham C, May C. Chronic low back pain in general practice: the challenge of the consultation. Fam Pract 1999;16:46

18. Corbett M, Foster N, Ong BN. GP attitudes and self-reported behaviour in primary care consultations for low back pain. Fam Pract 2009:26:359-64.

19. Pillastrini P, Gardenghi I, Bonetti F, et al. Recommandations cliniques pour la prise en charge des lombalgies chroniques communes en médecine de premier recours. Rev Rhum 2011;78:557-

20. Institute of Health Economics. Evidence-informed primary care management of low back pain. Clinical practice guideline. Alberta : IHE, 2015.

21. Agence nationale d'accréditation et d'évaluation en santé. Prise en charge diagnostique et thérapeutique des lombalgies et lombosciatiques communes de moins de trois mois d'évolution. Paris : Anaes, 2000.

22. Agence nationale d'accréditation et d'évaluation en santé. Diagnostic, prise en charge et suivi des malades atteints de lombalgie chroniques. Paris : Anaes, 2000.

23. Chou R, Qaseem A, Snow V, et al. Diagnosis and Treatment of Low Back Pain: A Joint Clinical Practice Guideline from the Ameri-can College of Physicians and the American Pain Society. Ann Intern Med 2007;147:478-91.

24. Verhagen AP, Downie A, Popal N, Maher C, Koes BW. Red flags presented in current low back pain guidelines: a review. Eur Spine J 2016;25:2788802.

25. Henschke N, Maher CG, Refshauge KM, et al. Prevalence of and screening for serious spinal pathology in patients presenting to primary care settings with acute low back pain. Arthritis Rheum 2009;60:3072-80.

26. Henschke N, Maher CG, Ostelo RWJG, de Vet HCW, Macaskill P, Irwig L. Red flags to screen for malignancy in patients with low -back pain. Cochrane Database Syst Rev 2013;2:CD008686.

27. Williams CM, Henschke N, Maher CG, et al. Red flags to screen for vertebral fracture in patients presenting with low-back pain. Cochrane Database Syst Rev 2013;1:CD008643.

28. Agence de la santé et des services sociaux de Montréal. CLIP : Clinique des Lombalgies Interdisciplinaire en Première ligne. Guide de pratique. Montréal : ASSSM, 2006.

29. Agence nationale d'accréditation et d'évaluation en santé. L'imagerie dans la lombalgie commune de l'adulte. Paris : Anaes, 1998.

30. Foltz V. Lomblagie commune. Informer et former pour une prise en charge active. Concours Médical 2014;136:686.

31. Valat JP, Rozenberg S, Bellaïche L. Lombalgie. Critères cliniques et d'imagerie. Revue du Rhumatisme monographies 2010:77:158-66

32. Ramond A. Bouton C. Richard I. et al. Psychosocial risk factors for chronic low back pain in primary care -- a systematic review. Fam Pract 2011;28:12-21.

33. Kendall NA, Linton SJ, Main CJ. Guide to assessing psychosocial yellow flags in acute low back pain: risk factors for long-term disability and work loss. Wellington : Accident Rehabilitation and Compensation Insurance Corporation of New Zealand and the National Health Committee, 1997.

34. Airaksinen O, Brox JI, Cedraschi C, et al. Chapter 4 European guidelines for the management of chronic nonspecific low back pain. Eur Spine J 2006;15: s192-300.

35. Koes BW, van Tulder M, Lin C-WC, Macedo LG, McAuley J, Maher C. An updated overview of clinical guidelines for the management of non-specific low back pain in primary care. Eur Spine J 2010:19:2075-94

36. Polatin PB, Kinnedy RK, Gatchel RJ, Lillo E, Mayer TG. Psychiatric illness and chronic low-back pain: the mind and the spine -which goes first? Spine 1993;18:66-71.

37. Sullivan MJL, Thorn B, Haythornthwaite JA, et al. Theoretical perspectives on the relation between catastrophizing and pain. Clin J Pain 2001;17:5264.

38. Vlaeyen JW, Linton SJ. Fear-avoidance and its consequences in chronic musculoskeletal pain: a state of the art. Pain 2000;85:317-32

39. Nicholas MK, Linton SJ, Watson PJ, Main CJ, Group the "Decade of the FW. Early identification and management of psy chological risk factors (« Yellow Flags ») in patients with low back pain: a reappraisal. Phys Ther 2011;91:737-53.

40. Cambou M, Bouton C. Les outils d'évaluation du risque de passage à la chronicité chez le patient lombalgique. Utilisation en soins primaires. Thèse de médecine : Université d'Angers, 2010.

41. Jellema P, van der Windt DAWM, van der Horst HE, Stalman WAB, Bouter LM. Prediction of an unfavourable course of low back pain in general practice: comparison of four instruments. Br J Gen Pract 2007;57:15-22.

42. National Institute for Health and Care Excellence. Low back pain and sciatica in over 16s: assessment and management. London: NICE, 2016.

43. Qaseem A, Wilt TJ, McLean RM, Forciea MA, Clinical Guidelines Committee of the American College of Physicians. Noninvasive treatments for acute, subacute, and chronic low back pain: a clinical practice guideline from the American College of Physicians. Ann Intern Med 2017;166:514-30.

44. Ramond-Roquin A, Bouton C, Gobin-Tempereau A-S, et al. Interventions focusing on psychosocial risk factors for patients with non-chronic low back pain in primary care--a systematic review. Fam Pract 2014;31:379-88.

45. Saragiotto BT, Machado GC, Ferreira ML, Pinheiro MB, Abdel Shaheed C, Maher CG. Paracetamol for low back pain. Cochrane Database Syst Rev. 2016;6:CD012230.

46. Laporte C, Wilmart F. L'approche centrée autour du patient dans la prise en charge du diabète de type 2 en médecine générale. exercer 2009;14-5.

47. Stewart M. Towards a global definition of patient centred care. BMJ 2001;322:444-5.

48. Prescrire rédaction. Bilan 2016 des médicaments à écarter :

douleur - rhumatologie. La Revue Prescrire 2016;36:143. 49. Petit A, Rozenberg S, Fassier JB, Rousseau S, Mairiaux P, Roquelaure Y. Pre-return-to-work medical consultation for low back pain workers. Good practice recommendations based on systematic review and expert consensus. Ann Phys Rehabil Med 2015;58:298-304.

50. National Institute for Health and Care Excellence. Neuropathic pain: the pharmacological management of neuropathic pain in adults in non-specialist settings. London : NICE, 2013.

51. Burton AK, Balagué F, Cardon G, et al. Chapter 2. European guidelines for prevention in low back pain : November 2004. Eur

Spine J 2006;15 (Suppl 2): S136-168. 52. Punnett L, Prüss-Utün A, Nelson DI, et al. Estimating the global burden of low back pain attributable to combined occupational exposures. Am J Ind Med 2005;48:459-69.

Care | Low pain back

53. European Agency for Safety and Health at Work. Research on work-related low back disorders. Luxembourg : EASHW 2000.

54. Dagenais S, Caro J, Haldeman S. A systematic review of low

back pain cost of illness studies in the United States and internationally. Spine J 2008;8:8-20.
55. Fouquet N, Ha C, Bodin J, et al. Surveillance des lombalgies et de leurs facteurs de risque professionnels dans les entreprises des Pays de la Loire. Bull Epidemiol Hebd 2010;48-50.

56. Petit A, Roquelaure Y. Recommandations de bonnes pratiques pour la surveillance médico-professionnelle du risque lombaire pour les travailleurs exposés à des manipulations de charges. Arch Mal Prof Environ 2014;75:6-33.

57. Räber C, Ramond A. Les procédures diagnostiques, thérapeutiques, préventives et administratives réalisées ou prescrites par le médecin généraliste pour les patients de 18 à 65 ans consultant pour lombalgie Résultats originaux issus de l'étude Ecogen. Thèse de médecine : Université d'Angers, 2014.

58. Verger P, Ménard C, Richard J-B, Demortière G, Beck F. Collaboration between general practitioners and occupational physicians: a comparison of the results of two national surveys in Fran-ce. J Occup Environ Med 2014;56:209-13.

59. Anema J, van der Giezen AM, Buijs P, van Mechelen W. Ineffective disability management by doctors is an obstacle for return -to-work: a cohort study on low back pain patients sicklisted for 3 -4 months. Occup Environ Med 2002;59:729-33.

60. Quélin A, Bègue C. Relations entre médecins généralistes et médecins du travail; revue systématique de littérature. Thèse de médecine : Université d'Angers, 2016.