DIAGNOSIS AND MANAGEMENT OF ACUTE LOW BACK PAIN (<3 MONTHS) WITH OR WITHOUT SCIATICA

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Diagnosis and management of acute low back pain (<3 months) with or without sciatica

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GUIDELINES

Scope of the guidelines

These guidelines apply to low back pain and acute low back pain with sciatica, defined as pain which has been present for less than three months. Low back pain is pain in the lumbar region which does not radiate beyond the gluteal fold, while low back pain with sciatica is defined as lumbar pain radiating distally into the leg, in the dermatome of the L5 or S1 nerve root.

Grading of the guidelines

Guidelines are graded A, B or C according to the following system:

- A grade A guideline is based on scientific evidence established by trials of a high level of evidence, for example randomised controlled trials of high-power and free of major bias, and/or meta-analyses of randomised controlled trials or decision analyses based on properly conducted studies;
- A grade B guideline is based on presumption of a scientific foundation derived from studies of an intermediate level of evidence, for example randomised controlled trials of low power, well-conducted non-randomised controlled trials or cohort studies;
- A grade C guideline is based on studies of a lower level of proof, for example case-control studies or case series.
- In the absence of scientific evidence, the proposed guidelines are based on agreement among professionals.

Initial evaluation

The initial evaluation of the patient includes history-taking and a clinical examination, and is intended to identify:

1) so-called symptomatic acute low back pain with or without sciatica:
   - suggestive of fracture: occurrence of trauma, use of corticosteroids, age over 70 (grade B);
   - suggestive of neoplasm: age over 50, unexplained weight loss, history of tumour or failure of symptomatic treatment (grade B). If this type of disease is suspected, a complete blood count and erythrocyte sedimentation rate test should be performed;
   - suggestive of infection: fever, pain with recrudescence at night, patient undergoing immunosuppressant therapy, urinary tract infection, IV drug use, prolonged corticosteroid therapy. If this type of disease is suspected, the following tests should be performed: a complete blood count, erythrocyte sedimentation rate, and determination of C reactive protein (CRP) (grade C).

2) diagnostic and therapeutic emergencies (grade C):
   - hyperalgesic sciatica, defined as pain felt to be unbearable and resistant to strong analgesics (opioid analgesics);
• paralysing sciatica, defined as a motor deficit initially graded lower than 3 (see MRC scale below), defined also or alternatively as the progression of a motor deficit;
• sciatica with cauda equina syndrome, defined as the onset of sphincter-related signs, and especially of incontinence or retention; hypoesthesia of the perineum or the external genital organs.

Rating of muscle strength according to the MRC scale (Medical Research Council of Great Britain)

<table>
<thead>
<tr>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Normal strength</td>
</tr>
<tr>
<td>4</td>
<td>Able to oppose gravity plus resistance</td>
</tr>
<tr>
<td>3</td>
<td>Able to move fully against gravity but not resistance</td>
</tr>
<tr>
<td>2</td>
<td>Able to move with gravity eliminated</td>
</tr>
<tr>
<td>1</td>
<td>Trace movement</td>
</tr>
<tr>
<td>0</td>
<td>No movement</td>
</tr>
</tbody>
</table>

Apart from the above (so-called symptomatic low back pain or emergencies), imaging need not be ordered within the first 7 weeks of the disease, except when the treatment selected (such as manipulation and infiltration) requires formal elimination of any specific form of low back pain. If there is no satisfactory progress, this period may be reduced (professional agreement).

Imaging to confirm that a disk is impinging on a nerve root should not be ordered except during workup before surgery or nucleolysis of a disk hernia (professional agreement). This type of treatment should only be undertaken after a period of between at least four to eight weeks. The examination of choice is MRI, or if this is not possible, CT scan, depending on availability.

There is no indication for electrophysiological investigation in low back pain or acute sciatica (grade C).

**Treatment**

There is no justification in the literature for routine prescription of either short or longer-term bed rest for acute low back pain with or without sciatica. It seems to be beneficial for the patient to continue carrying out ordinary activities, as far as the pain allows (grade B). The patient may continue to work or may resume work, with the agreement of the company medical officer.

Progression to chronic disease is often affected by psychological and socioprofessional factors, amongst others (grade B).

Drug therapy for pain control is indicated in acute low back pain with or without sciatica. The drugs used should be analgesics, nonsteroidal anti-inflammatory agents and muscle relaxants (grade B). No studies about the effects of combining these various types of drug were identified.

Systemic corticosteroids have not been proved to be effective (grade C).
No studies establishing the efficacy of acupuncture in acute low back pain were found (grade B).

Nerve root manipulation is of short-term benefit in acute low back pain. None of the various manual techniques has been proved to be superior to any of the others. There is no indication for manipulation in acute low back pain with sciatica (grade B).

Short-term education about the back, in small groups, is not beneficial in acute low back pain (grade B).

With regard to physiotherapy, flexion exercises have not been shown to be of benefit. Further studies are required concerning extension exercises (grade B).

The efficacy of epidural infiltrations is a moot point in acute low back pain with sciatica. If they are effective, the efficacy only lasts for a short time. There is no justification for intradural infiltration in acute low back pain with sciatica (grade B).

There is no indication for posterior facet joint injection in acute low back pain with sciatica (grade C).

No studies have been identified in the literature concerning mesotherapy, balneotherapy, or homeopathy.

The full report in French can be downloaded free of charge from the ANAES website www.anaes.fr or from www.sante.fr