



An Overview on the Role of Family Physician in Diagnosis and Management of Back Pain

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ABSTRACT

The main goal of this review is management of back pain. The problem with back pain is debilitating symptoms that affect many people and reduces the quality of life and their overall daily productivity. While many causes of back pain are manageable, it would still be an unfortunate experience to many patients as they tackle the pain to get back to a nearly normal lifestyle. In this article, we aim to review the diagnosis and management of patients with back pain in the primary health care setting. The data of this article were collected from randomized control trials, relevant articles, and observational studies from the electronic database PubMed with the keyword in the mesh: "back pain"[Mesh] and "management"[Mesh] within the title of documents or abstract. The diagnosis of back pain is the first step to appropriate management, which in turn relies more on patient acceptance of limitations of medical care and looking to the options offered by non-medical care.

Keywords: Back pain, Lumbago, Management, Physiotherapy

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INTRODUCTION

The problem with back pain is debilitating symptoms that affect many people and reduces the quality of life and daily productivity. While many causes of back pain are manageable, it would still be an unfortunate experience to many patients as they tackle the pain to return near-normal lifestyle. The terminology of lumbago includes pain at the lumbar area of the spine that could be radiating or inclusive of pain across the spine from the cervix to the sacrum. Many occupations are related to the presence of low back pain such as farmers and teachers (Chengane *et al.*, 2021; Vidal-Conti *et al.*, 2021).

MATERIALS AND METHODS

The data collected for this review was from relevant articles, randomized control trials, and observational studies sourced from the electronic database PubMed with the keyword in the mesh: "back pain"[Mesh] AND "management"[Mesh] within the title or abstract. Only English and translated English articles, documents, controlled and randomized clinical trials that are published and met with the needed criteria were included.

Review

In clinical practice, it is important to give information for daily living and coping with chronic pain. In many patients, a sedentary lifestyle could be both the cause and perpetrator of lower back pain. In this case, advice on healthy daily activities such as yoga, pilates, light exercise, and walking (Daiwasigamani *et al.*, 2021). These activities should be tailored to the person's needs and capabilities, as excessive exercise could exacerbate the underlying pain. Patients with back pain might require medical treatment with medication, and usually simple pain relief drugs are sufficient.

The family doctor should take back pain seriously, as good history taking and clinical examination helps rule out many emergencies and reach a clinical diagnosis. As discussed previously, the management should be tailored to the patient's needs and pre-episode lifestyle. Some patients would require referral to occupational therapy or physiotherapist or other medical specialties.

Aetiology

In many patients with lumbago, the cause is unidentifiable, but that does not deny the existence of pain. This is the case for non-specific back pain or a sprain or strain of back tendons or ligaments. Two main causes of back pain include intervertebral disc problems or spondylosis and joint dysfunction. Clinical history is important. There are more serious medical conditions such as a slipped disc or sciatica. The symptoms in emergency back pain are more prominent and sudden and are not relieved appropriately by pain relief medications. For instance, in both

sciatica and prolapsed disc cases, the pain is related to pressure on nerves. More often, when the diagnosis cannot be reached, a period of non-medical management is given before a re-assessment can be done (Roberts *et al.*, 2019; Omer *et al.*, 2021). This is because the minor symptoms will often resolve, while the more serious signs would persist and thereafter guide clinical diagnosis.

Emergency signs

The family doctor should assess the patient appropriately, especially ones with red flags for underlying emergency conditions. Patients could complain of symptoms directly related to nerve compressions such as numbness, peri genital tingling, dysuria, and urinary or fecal incontinence. Some patients could present with thoracic spine pain masquerading as chest pain or vice versa, in either situation an exclusion of more serious illnesses of the lungs and heart should be done, namely a chest radiograph and an electrocardiogram. Constitutional signs and symptoms are important questions to investigate, this includes fluctuations in temperature suggesting infection, or unintentional weight loss alerting to more morbid diagnoses. Anatomical defects should be taken into consideration, as this could be the case, especially in children and adolescents. Other patients could present with a history of an accident or a fall, and careful examination and referral to emergency services when appropriate are of utmost importance.

Non-medical management

Warm and cold compressions are useful strategies to control pain, and over time the pain perception is reduced and becomes more manageable in many cases. In modifying daily behavior, the management of back pain becomes more promising as patients learn to manage and lead near-normal lives. These non-medical therapies are important to alleviate stress, sleep deprivation, and exhaustion (Chengane *et al.*, 2021). A healthy attitude to the symptoms is necessary and some patients might require follow-up and encouragement to continue to aim for healthy lifestyles and management of their pain.

Medical management

In most patients, lower back pain would take months till full recovery, it is only in some people that the pain persists and medical management of chronic pain becomes necessary. Therefore, patients should be aware of when to seek medical help throughout their clinical progression. This includes cases where the pain does not alleviate across time when the pain debilitates the person from their daily activity, when the pain acutely or chronically worsens, or the patient is unable to cope. The family doctor can refer for more specialist advice in management. This could include group support for exercise, including further muscle and back strengthening and flexibility training (Abdullah *et al.*, 2020). Referral to a physiotherapist could help with back and spine massaging and mobility training and motivation. In ongoing clinical trials for patients with lumbosacral disk problems, benefits have been realized by the use of the warm acupuncture intervention technique as a specialist referred treatment for patients with acute low back pain (Li *et al.*, 2022). Moreover, elastic taping has shown improved pain relief in patients undergoing physiotherapy and rehabilitation from back pain (Bozkurt *et al.*, 2021).

Chiropractic intervention is an adjuvant to non-medical management and would benefit many patients presenting with pain in the neck and lower back (Chaibi *et al.*, 2021). However, evidence for chirotherapy benefit is still under study and may not be effective in all patients (Schiltenswolf & Schwarze, 2020). Motivation could also be achieved through cognitive behavioral therapy, where a psychologist could help the patient cope in a healthy mentality with their pain. A surgical referral is often done as a last resort to unyielding pain and in certain emergencies.

Prevention

In the therapeutic process of back pain alleviation, patients progressing into remission must be aware of prevention strategies. This includes correct posture during walking and sitting while continuing exercise focusing on building strength and flexibility (Dorner & Crevenna, 2016; Alkandahri *et al.*, 2021). Regular follow-up monthly with their family doctor or physiotherapist is advisable as it increases accountability and alerts the physician to any changes needed in management. A combination of a healthy dietary lifestyle, intentional weight loss with exercise could prove beneficial in previously overweight or obese patients with back pain, as it relieves much of the pressure on the spine. Supplementation of weight loss with dietary intervention can also assist in reducing pain intensity and improving quality of life (Mendonça *et al.*, 2021).

CONCLUSION

Pain is one of the longest problems that require continuous research in the medical field. This is because of the complexity of pain perception that is subjective rather than objective. The diagnosis of back pain is the first step to appropriate management, which in turn relies more on patient acceptance of limitations of medical care and the options offered by non-medical care.

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