

Olgu Sunumu

Rheumatoid Arthritis Presenting with Low Back and Leg Pain: An Uncommon Case

İdris ALTUN, Kasım Zafer YÜKSEL

Kahramanmaraş Sütçü İmam Üniversitesi Tıp Fakültesi, Beyin ve Sinir Cerrahisi Anabilim Dalı, Kahramanmaraş

Low back is a very frequently seen disease which can be an indicator of many diseases with heterogeneous distribution. Mechanical causes are responsible for 90%-95% of cases with chronic low back pain and the most common reasons are degenerative disc pathologies and facet joint problems. The 5%-10% of non-mechanical causes of low back pain include neoplastic primary or metastatic problems, infection, fibromyalgia, somatoform disorders, inflammatory arthritis, Paget's disease and Scheuermann kyphosis. In rheumatoid arthritis patients, low back pain has been reported at the rate of 33-40%, but this low back pain has been reported not as a symptom of RA but as a development associated with inflammation, flare-up of disease, or the use of insufficient or ineffective drugs. Herein, we have reported a patient who presented with complaints of low back and leg pain without any additional complaint and diagnosed as rheumatoid arthritis.

Patients may not always present with clinical symptoms of RA and it should be kept in mind that the first symptoms of RA can be low back and leg pain.

Keywords: Low back, leg pain, rheumatoid arthritis, diagnosis

J Nervous Sys Surgery 2015; 5(1-2):26-29

Bel ve Bacak Ağrısı Belirtileri Veren Romatoid Artrit: Ender Bir Olgu

Çok sık görülmekte olan bel ağrıları çok sayıda ve heterojen dağılım gösteren hastalıkların bir göstergesi olabilir. Kronik bel ağrısının %90-95'i mekanik nedenlerle olup, en fazla nedeni dejeneratif disk patolojileri ve faset eklem sorunlarıdır. Bel ağrısının mekanik olmayan nedenleri %5-10 olup, bunlar neoplastik primer ya da metastatik sorunlar, infeksiyon, fibromiyalji, somatoform bozukluklar, inflamatuvar artritler, paget hastalığı, scheuermann kifozudur. RA'lı hastalarda bel ağrısının %33-40 oranında görüldüğü, ancak bu bel ağrısının RA'nın belirtisinden çok enflamasyon, hastalık alevlenmesi, yetersiz ve etkisiz ilaç kullanımına bağlı olarak geliştiği bildirilmiştir. Biz bu olgu sunumunda ilk başvuru yakınması olarak bel ve bacak ağrısı olan ve ek başka bir yakınması olmayan, RA tanısı konulan olgumuzu sunduk.

Hastalarda her zaman klinik olarak gözlenen RA belirtilerinin mevcut olmayabileceği ve RA'in ilk belirtilerinin bel ve bacak ağrısı olabileceği akılda tutulmalıdır.

Anahtar kelimeler: Bel ağrısı, bacak ağrısı, romatoid artrit, tanı

J Nervous Sys Surgery 2015; 5(1-2):26-29

Rheumatoid arthritis (RA) is a chronic, inflammatory, systemic rheumatism disease with peripheral synovial joint involvement which may also affect other tissues and organs. Cervical involvement is often seen

and less often, thoracic and lumbar vertebrae involvement are observed. Inflammatory arthritis is known to mostly involve cervical vertebrae.

Low back pain is the second most common

Alındığı tarih: 18.04.2016

Kabul tarihi: 25.04.2016

Yazışma adresi: Yrd. Doç. Dr. İdris Altun, Kahramanmaraş Sütçü İmam Üniversitesi Tıp Fakültesi, Beyin ve Sinir Cerrahisi Anabilim Dalı, Kahramanmaraş

e-mail: idrisaltun46@hotmail.com

reason worldwide for consultation with a doctor and is seen at the incidence of 10% within chronic diseases in the general population ⁽¹⁾. Its incidence throughout lifetime is 60%-80%. It is seen more frequently in females and increases with increasing age ^(2,3). Ninety to 95% of chronic low back pain is mechanical in character and the most common reason is degenerative disc diseases. The second most common reason is facet diseases accompanied by lumbar radicular pain in adults aged 35-50 years ^(3,4). In the differential diagnosis of low back pain, clinical symptoms and physical examination are important. Radiological and electrophysiological methods are helpful in the diagnosis. Low back pain has been reported in 33%-40% of RA patients and the inflammation of low back pain and activation of the disease have been reported to develop as a result of drug effects ^(1,4). In the light of current literature, a patient diagnosed as RA who presented with complaints of low back and leg pain without any additional complaint will be presented

CASE

A 32-year old female patient presented with complaints of chronic low back pain which worsened for the last 2 months had worsened and pain had started in the left leg. The patient presented at the clinic as she was experiencing difficulty in standing and walking. She reported that the pain worsened when standing, walking, straining and coughing and decreased with rest. In the anamnesis there was no morning stiffness or pain and swelling in the hand, ankle or finger joints. On the physical examination there was paravertebral sensitivity and the Lasègue test was positive at 30°. The patient had no motor deficit and there was hypoesthesia on the left L5 and S1 dermatomes. On the lumbar magnetic resonance imaging (MRI) any evidence explaining radiculopathy could not be found (Figure 1). In the laboratory test results, ASO, sedimentation



Figure 1. On the lumbar sagittal T2 weighted magnetic resonance image there was no finding to explain the radiculopathy.

CRP and rheumatoid factor values were within the normal range and salmonella and brucellosis tests were negative. As the patient had severe low back and leg pain, mechanical low back pain was considered, then the patient was admitted to the clinic and rest and analgesic treatment was started.

Despite the medical treatment, there was no change in the severity of low back and leg pain. EMG was applied and the results were within normal limits. While the patient was hospitalized, the Rheumatology Clinic was consulted with respect to inflammatory low back pain etiology, but no pathology was considered related to rheumatology. The medical treatment was organized and the patient was discharged. At the 1-month follow-up examination, as complaints of knee pain, difficulty getting up in the morning and opening her hands were started, the Rheumatology Clinic was again consulted and a diagnosis of RA was made. With the commencement of RA treatment, the complaints of low back and leg pain were resolved.

DISCUSSION

Low back pain is very frequently seen and can be an indicator of many diseases with heterogeneous distribution. Mechanical causes are responsible for 90%-95% of the cases with chronic low back pain and the most common etiologies are degenerative disc pathologies and facet joint problems. Five to 10% of non-mechanical causes of low back pain include neoplastic primary or metastatic problems, infection, fibromyalgia, somatoform disorders, inflammatory arthritis, Paget's disease and Scheuermann kyphosis ^(2,5). The severity the extent, the form, and duration of the low back pain are extremely important in the patient history. In mechanical low back pain, the complaints of pain increase when standing, walking or sitting for lengthy periods and decrease or recover with rest, whereas the completely opposite complaints are seen with inflammatory pain. In cases of lumbar disc hernia, pain increases when standing, walking and with sneezing and straining when intraspinal pressure increases. Constitutional signs in the history such as fever, loss of appetite or weight loss suggest infections. Excessive weight loss is a symptom which may be seen in neoplastic pathologies ^(2,6). In the current case, as the pain had been ongoing for a long time, and recently affected the left leg and increased when standing, walking, coughing and straining and decreased with rest, so disc hernia was considered.

In the diagnosis of low back and leg pain, clinical symptoms, examination findings and MRI are helpful ⁽⁵⁾. During physical examination, Lasègue test is applied and motor and sensory deficits are evaluated ⁽⁶⁾. In the diagnosis of RA, the anamnesis, physical examination and serological test results are important. The American Rheumatology Association has defined criteria for RA. These are, morning stiffness lasting for at least 1 hour, involvement of more than 3 joint regions as evaluated by the physician, soft tis-

sue swelling, involvement of hand joints, symmetrical arthritis, rheumatoid nodules, rheumatoid factor positivity, and erosions in the hand and wrist joint as seen on radiograms. Diagnosis is made with at least 4 of these criteria ⁽⁷⁾. RA generally starts slowly and insidiously and only becomes evident with time.

In the early stage, RA is difficult to differentiate from other forms of arthritis. The emergence of extra-articular findings facilitates establishment of diagnosis and differentiation from other diseases. Joint symptoms are the most common symptoms in RA. Morning stiffness, restricted movement, pain and swelling are seen ^(4,7). In the current patient, although there were not any diagnostic criteria of RA, the Lasègue test was positive at 30° and hypoesthesia was determined on the left L5-S1 dermatomes. In patients with findings of radiculopathy in the lower extremities, without any explanatory MRI findings, the assistive method of electrophysiology has been reported to have 88% diagnostic accuracy ⁽⁷⁾. Umay et al applied EMG to 32 patients with radicular low back and leg pain and 22% of the patients were reported as normal, polyneuropathy was determined in 25% and radiculopathy in 53% of the patients ⁽⁷⁾. Lumbar MRI applied to our patient, did not reveal any pathology, and EMG of the lower extremities yielded normal results..

In RA patients, low back pain is seen at an incidence of 33-40%, however low back pain has been reported not as a symptom of RA but as a manifestation developed in association with inflammation, flare-up of disease, or the use of insufficient or ineffective drugs ^(1,4). In another study, lumbar spine involvement was reported in 5% of male and in 3% of female RA patients ⁽⁷⁾. White et al. reported that an interforaminal rheumatoid pannus in an RA patient induced nerve root pressure at many levels in the lumbar region and as a result cauda equina syndrome was

seen to develop⁽⁸⁾. Williams et al reported 6 RA cases who presented at the polyclinic with complaints of low back pain. All the patients were female and the disease was in its active phase. Examination of the radiograms of the lumbar region revealed that all had L4-5 epiphyseal joint degeneration and in 1 case, scoliosis was determined and narrowing of the intervertebral disc space at various levels, vacuum phenomenon, small osteophytes, subluxation and sclerosis findings on the joint surfaces⁽⁹⁾. In a study of 106 RA patients by Kawaguchi et al, lumbar spine involvement was investigated and low back pain was observed in 40%, numbness of the leg in 18%, intermittent claudication associated with cauda equina syndrome in 12% and radiological findings in 57% of the patients⁽¹⁾. In the current study, although the low back and leg pain was consistent with disc hernia, any associated findings were not detected both radiologically or electrophysiologically.

In conclusion, the disease of the current case started with complaints of low back and leg pain, clinically consistent with disc hernia and RA was observed which became clinically evident over time. As RA may start slowly and insidiously, it may be the causative agent of patients with low back and leg pain. Patients may not always present with RA symptoms which can be clinically observed and it should be kept in mind that the first symptoms of RA could be low back and leg pain.

REFERENCES

1. **Kawaguchi Y, Matsuno H, Kanamori M, Ishihara H, Ohmori K, Kimura T.** Radiologic findings of the lumbar spine in patients with rheumatoid arthritis and a review of pathologic mechanisms. *J Spinal Disord Tech* 2003;16:38-43.
<http://dx.doi.org/10.1097/00024720-200302000-00007>
2. **Devereaux M.** Low back pain. *Med Clin North Am* 2005;93:477-501.
<http://dx.doi.org/10.1016/j.mcna.2008.09.013>
3. **Macfarlane GJ.** Looking back: developments in our understanding of the occurrence, aetiology and prognosis of chronic pain 1954-2004. *Rheumatology* 2005;44:23-6.
<http://dx.doi.org/10.1093/rheumatology/kei057>
4. **Neva MH, Hakkinen A, Isomaki P, Sokka T.** Chronic back pain in patients with rheumatoid arthritis and in a control population: prevalence and disability-a 5-year follow-up. *Rheumatology* 2011;50:1635-9.
<http://dx.doi.org/10.1093/rheumatology/ker173>
5. **Henschke N, Maher CG, Refshauge KM.** A systematic review identifies five "red flags" to screen for vertebral fracture in patients with low back pain. *J Clin Epidemiol* 2008;61:110-8.
<http://dx.doi.org/10.1016/j.jclinepi.2007.04.013>
6. **Greenough CG.** Degenerative disc and vertebral disease-clinical. *Surgery* 2009;27:301-5.
<http://dx.doi.org/10.1016/j.mpsur.2009.04.010>
7. **Umay EB, Bal A, Gundogdu I, Karsli PB.** Polyneuropathy and radiculopathy in rheumatoid arthritis patients with low back pain: Clinical characteristics, functional disability, depression, anxiety and quality of life. *The Egyptian Rheumatologist* 2015;37:151-7.
<http://dx.doi.org/10.1016/j.ejr.2014.11.007>
8. **White KP, Harth M.** Lumbar pannus presenting as cauda equina syndrome in a patient with longstanding rheumatoid arthritis. *Rheumatol* 2001;28:627-30.
9. **Williams HS, Jayson MIV, Baddeley H.** Rheumatoid involvement of the lumbar spine. *Ann Rheum Dis* 1977;36:524-31.
<http://dx.doi.org/10.1136/ard.36.6.524>