

Case Report

Back to the individual-social life in a patient with avascular necrosis of femur by bio resonance technology: A case report

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Abstract

Background: More than 20,000 people annually develop avascular necrosis (AVN) worldwide, most of whom aged 20 to 50 years, and should refer to orthopedic surgeons for treatment. The quality of life of such patients is low due to chronic pain and sometimes they are deprived of their occupation and social life.

Presentation of case: A 57-year-old male patient who developed AVN due to long-term treatment with corticosteroids was presented. Regarding the correlation between chronic diseases and Social Determinants of Health, to treat such patients, improve their quality of life, and help them back a normal life, safe complementary therapies, such as bio resonance, are recommended.

Keywords: Avascular Necrosis; Chronic Pain; Bio resonance; Social Determinants of Health

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Introduction

Treatment with systemic corticosteroids in chronic illnesses such as severe autoimmune diseases, exacerbation of COPD, lymphoma, and leukemia are associated with both therapeutic effects and specific side effects such as Cushing's syndrome, hyperglycemia, adrenal failure, and cataracts (1-5).

Avascular Necrosis femoral head (AVN) is one of the most serious corticosteroids-associated diseases, which is characterized by severe pain and inability to walk after a bone loss. Although the pathogenesis of AVN is still unclear, the use of corticosteroids is its commonest cause. The main and definitive treatment of AVN is the total hip arthroplasty (THA) (6, 7). One of the complementary and alternative

therapies for pain relief is the use of a bio resonance apparatus, which also has a relatively good effect on joint pain.

Case presentation

The patient was a 57-year-old male who developed pulmonary irritation and inflammation of the pulmonary tract at the age of 52 following the inhalation of the resin phenol in a closed space; he secondary developed severe asthma and loss of smelling sense, and after referring to a specialist, underwent corticosteroid therapy and his respiratory complications were treated following the completion of corticosteroids doses. But afterward, in March 2014 he experienced severe pain in the groin area resulting in motor constraints including intermittent limping, morning weakness, and pain prickling in the femoral

head and hip region. The patient had only one hour of sleep during the day due to the intensity of pain, but after referring to the urologist and rejection of the hernia diagnosis, his pain was controlled following the administration of strong anti-inflammatory and analgesic agents. After a physical examination and radiography imaging, AVN was diagnosed and he was referred to an orthopedic surgeon for treatment (Figure 1).

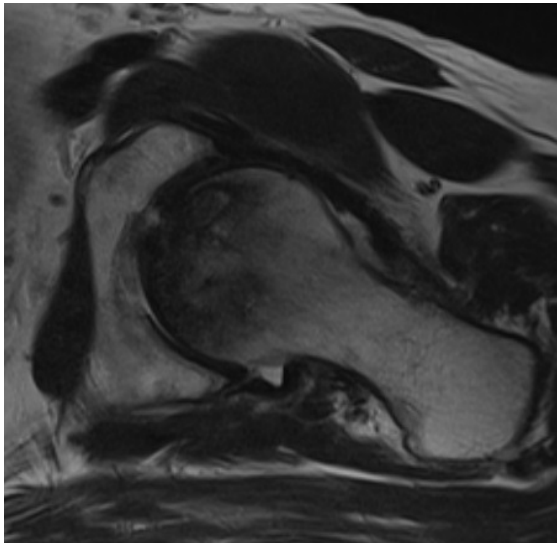


Figure 1. MRI of the hip that shows avascular necrosis

In October 2015, following the referring to the Bioresonance Research Center for the first time and the initial examinations, severe pain in the femur and intermittent limping along with morning weakness were reported. The respiratory and cardiovascular systems were also examined and the results were normal. There was no lesion in the femur area, and the mobility of the hip joint was restricted, and walking was difficult to even with the help of a cane. To start bio resonance therapy, first, a full explanation of the pain relief process was given to the patient and he was familiarized with the treatment method. Then, after obtaining the informed consent, the bio resonance tests including evaluation of the energy systems, mental health, health status of involved organs and limbs, as well as purifying the body of the toxins was

performed and accordingly, bio resonance pharmaceutical interventions were started. After a month, as soon as the patient was physically and psychologically prepared, bio resonance therapy (BRT) was initiated. Then, the patient was exposed to very low electromagnetic radiations affecting the AVN pathology. At this stage, the patient was exposed to 11 frequency items to the right and left hip joints for 55 minutes per session. The treatment was initially given three sessions per week for two consecutive weeks, and after retesting, the frequency items were modified for the next two weeks. After four weeks of giving the treatment, the intensity of pain reduced from 7 to 5 based on the visual analogues scale (VAS). It is noteworthy that the patient was also under modern medication during the BRT, but according to his remarks, the need for sedatives reduced. Also, the patient did not use his cane one month after receiving BRT and his morning mobility restrictions also remarkably reduced during this period. Considering the positive effects of BRT, the number of treatment sessions gradually reduced within two months to twice a week. During the past three years, owing to the fruitfulness of the therapeutic program for the patient, the interval of BRT sessions was increased to once a month based on the physician discretion. The orthopedist was also satisfied with the positive changes to such an extent that the THA was removed from the patient's treatment plan.

Discussion

Systemic corticosteroid treatment is widely used to reduce inflammation in various inflammatory diseases. Unfortunately, such drugs have serious side effects, including AVN to the patients. Among the corticosteroid-associated complications, Osteonecrosis of the femoral head (ONFH) has the most serious, irreversible adverse effects (6). Pain and mobility restrictions are the most important symptoms that a patient with ONFH deals with. The definitive treatment for such patients is

surgery and THA, but some patients are reluctant to undergo it for various reasons. Therefore, such complications reduce the patient's quality of life in the long run and even may cause job loss and social isolation, which affect the social health of the patient. All these persuade the patients to try non-conventional (complementary or alternative) methods to relieve their pain and solve their problems. It should be noted that complementary therapies are extensively used worldwide to relieve and treat chronic pain. Acupuncture at the site of pain, cryo-practice, and water therapy are different ways to reduce pain in patients with joint problems, which can help them back to their normal life. Bioresonance is one of the methods used in recent years for such patients; in a study in Romania (2011), 60 patients with arthrosis underwent complementary BRT modulators. These medicines reduced the need of patients for analgesics and increased their mobility and quality of life (8). Regarding the current case report, despite the presence of radiological signs in the femur head, according to the patient's report, clinical examinations, and scans from the hip joint, a significant improvement was observed and patient's pain and mobility restrictions significantly reduced following the application of this method. Since the bio resonance is a safe method that relieves joint-derived pain, increases the quality of life of patients and improves their performance and social life, it is suggested to apply it to those patients who are reluctant to use oral medications or

underwent surgical therapies. The authors wish to thank the patient for his cooperation and consent for reporting his case.

Conflict of interest

Authors declare no conflict of interests.

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