

**A CASE REPORT ON OSTEOARTHRITIS- AN ACUPUNCTURE TREATMENT AT SUOXI- HOSPITAL, DHAKA, BANGLADESH****Dr. S. M. Shahidul Islam\*<sup>1</sup>, Dr. Huihui Li<sup>2</sup> and Sabina Yasmin<sup>3</sup>**

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**ABSTRACT**

The most frequent kind of arthritis in joints is osteoarthritis (OA). It is one of the most common causes of pain, loss of function, and disability in people in Western societies. By the time a person is 65 years old, he or she is likely to have radiographic evidence of osteoarthritis. Ischemic heart disease (IHD) is the second leading cause of job impairment in men over the age of 50, accounting for more hospitalizations than rheumatoid arthritis (RA) each year in the United States. The epidemiologist is baffled by osteoarthritis, despite the fact that it has a significant public health effect. An asymptomatic 53-year-old male patient has been complaining of a both knee pain for 2 years, came to at Suo-Xi Hospital in Shantinagar, Dhaka, Bangladesh for remedy. After examine and testes, the patient were treated with acupuncture. Surprisingly after the 8<sup>th</sup> session of acupuncture the pain of both knees were no longer seen. There were positive outcomes in later investigations. For the first time in two years, the patient was able to walk without discomfort in his knee. Acupuncture may be beneficial for persons with osteoarthritis, according to the findings of this study.

**KEYWORD:** Osteoarthritis, Acupuncture, Mobilization, Physiotherapy, Rheumatoid arthritis, Epidemiology.**INTRODUCTION**

One of the most common causes of impairment in the United States and globally is osteoarthritis (OA), a degenerative joint disease that is also known as wear-and-tear arthritis or age-related arthritis.<sup>[1]</sup> Rheumatoid arthritis is a medical term that refers to inflammation in the joints. More than 100 rheumatic illnesses and ailments affecting the joints, surrounding tissues, and other connective tissue are collectively referred to as "arthritis" in the public health sector. For the sake of this primer, we shall only discuss primary osteoarthritis of the knee. Osteoarthritis is the most frequent joint condition in the United States.<sup>[2]</sup> The aging population and the obesity pandemic will undoubtedly lead to a rise in the number of persons suffering from symptoms of osteoarthritis of the knee.<sup>[3]</sup> This kind of knee arthritis affects all three of the joints of the knee (medial, lateral, and patellofemoral) and normally progresses slowly over the course of 10 to 15 years, making everyday activities difficult.<sup>[4]</sup> Because of aging and not inflammation, it was traditionally thought of as "wear and tear" of the articular cartilage condition. It is widely known that knee osteoarthritis has a complex origin, even though the disease mechanism is still under research. A variety of factors influence knee OA, including inflammatory and

biomechanical whole-organ disease processes, innate immunity, joint shape and dysplasia, trauma, and inflammation caused by metabolic syndromes. In addition, family history, age, obesity, diabetes, synovitis, systemic inflammatory mediators, and a variety of other factors all play a role.<sup>[5-12]</sup> In all instances of osteoarthritis, deterioration to the articular cartilage, growth of bone osteophytes, and sclerosis of the subchondral bone may be recognized pathologically. Knee osteoarthritis risk factors may be classified as either non-modifiable or modifiable. It is not impossible to change a person's genetic predisposition to develop osteoarthritis of the knee, nor can they do anything about abnormalities in the bone structure around their knee joint, which are both hereditary and congenital risk factors. Risk factors that can be altered may be used as targets for therapy. It is the most prevalent risk factor in the United States that may be changed: gaining weight adds 2 lbs to 4 lbs (0.9-1.8 kg) of additional pressure on one's knees for every pound added. Extra weight increases joint loading, resulting in damage to weight-bearing joints and unfavorable consequences associated with inflammation. Excess weight. Based on the patient's medical history and physical examination, x-rays are often used to confirm the diagnosis. In most cases,

laboratory testing are used to rule out alternative possibilities. Functional and quality of life are two of the primary goals of current therapy. NSAIDs, acetaminophen, braces, physical therapy, weight reduction, transcutaneous electrical nerve stimulation (TENS), and intra articular cellular injections are no longer the only options. Surgery is one of the several options for treating severe arthritis.

### CASE REPORT

With both knee problems over the last two years, the 53-year-old man found it difficult to communicate, which is

why he came to our clinic for treatment. We started with regular testes and found that all of the findings were statistically significant and in the expected direction. The patient's father and mother were both diabetic, according to the results of the family inquiry. It was discovered that the patient did not suffer from any serious comorbidities. We came to the conclusion that a Skiagram would be appropriate to complete. On the skiagram of the right knee joint with anteroposterior and lateral views, osteophytes were discovered in the bones that make up the right knee joint. In addition, all joint gaps were seen to be preserved in the tibiae.



Picture 1: Skiagram revealing Osteoarthritis at knee joint.

Knee Osteoarthritis affects most persons aged 65 or older, with prevalence in the US of 33.6% (12.4 million) (12.4 million). Compared to males, women are more likely to be affected (42.1%) (31.2%). Women are more likely than males to have symptoms of radiographic knee osteoarthritis, and African Americans experience more knee and hip problems than whites. Symptomatic knee Osteoarthritis has been associated to a high incidence of

strenuous physical activity, particularly occupations involving kneeling, knee-bending, squatting, and extended standing. In comparison to other forms of Osteoarthritis, knee osteoarthritis is more common. Women who are fat are more likely to get knee Osteoarthritis as they age. It was determined that Acupuncture at both knee joints, Chinese Methods, and Physiotherapy would be used to treat the patient.



Figure 2, 3 & 4: Giving Acupuncture at both.

The final result was astonishing. After the 8<sup>th</sup> session of the acupuncture improvement was seen. The patients both knee joint pain was no longer troublemaking.

## DISCUSSION

For a long time, osteoarthritis was considered a natural part of aging and a mechanical result of "wear and tear," leading to the phrase "degenerative joint disease." According to modern understandings, however, osteoarthritis can only be attributed to a complex interaction of a variety of elements, including joint integrity and hereditary susceptibility to the disease. Radiographic evidence of osteoarthritis in the knee is seen in the majority of persons by the age of 65 and in more than seventy-five percent of people over the age of 75.<sup>[12]</sup> Osteoarthritis is more common in older women than in males, despite the fact that the causes and processes are not fully known. Medial tibiofemoral compartment connects the midline of the shinbone with a portion of the medial femoral condyle. Lateral tibiofemoral compartment connects the midline of the shinbone with a portion of lateral femoral condyle. Patellofemoral joint connects the kneecap to the femur. There are three compartments in each knee: Knee movement is facilitated by these three compartments, which work together to produce a modified hinge joint that facilitate knee flexion and extension. The knee joint's ability to perform its normal functions might be harmed by carrying an excessive amount of weight. There has been a consistent correlation between obesity (BMI) and knee osteoarthritis in numerous cross-sectional and longitudinal investigations.<sup>[13]</sup> The link between obesity and osteoarthritis is complicated for a number of reasons, not the least of which is the increased joint loading that leads to damage to weight-bearing joints. Knee osteoarthritis may be caused by a variety of factors, including obesity. An increase in joint stress, as well as changes in body composition and inflammation-related side effects, as well as behavioral variables such a decrease in physical activity and the resulting loss of muscle strength that serves as a protective buffer.<sup>[14]</sup> There is also a strong likelihood that the prevalence of obesity won't go down, which means that knee osteoarthritis and knee arthroplasty demand will likely rise.<sup>[15]</sup>

In our clinic, we saw a 53-year-old guy who had been suffering from knee discomfort for the last two years. Osteophytes have been found in the bones that make up the right knee joint of a skiagram. All of the joint spaces and tibial spines were intact. Acupuncture, Physiotherapy, and Chinese treatment were used to treat the patient. A significant improvement was seen after the eighth acupuncture treatment. Both knee joints of the patients were no longer a problem.

## CONCLUSION

A further examination was conducted, and the findings were really remarkable. It was the 8th acupuncture

session when the patient's knee joint pain began to subside. Osteoarthritis patients have found acupuncture to be useful.

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