

REHAB / RECOVERY / PHYSIOTHERAPY

# Osteoarthritis of the Hip and Acupuncture

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Hip pain due to osteoarthritis is a common condition related to "wear and tear" degeneration of the articular surface of the joint. I would like to discuss the diagnosis and assessment of pain due to hip joint arthritis and then outline a four-step approach to treat this condition with acupuncture. Step one includes the tendino-muscle meridians. Step two discusses common distal points used for treating hip pain due to osteoarthritis as well as treatments using extraordinary meridians and auricular therapy. Internal organ (*zang-fu*) imbalances are summaried in step three. And, step four outlines local and adjacent acupuncture points used to treat hip pain. The extraordinary point *Jiankua* is discussed in detail, a point that is located in the gluteus medius and gluteus minimus muscles. Other local and adjacent points include GB 29, GB 30, Bl 53, and Bl 54. The quadratus lumborum muscle, often secondarily involved, is included in adjacent treatment.

This article presents various techniques and protocols that have been clinically useful to me in the acupuncture treatment of patients with osteoarthritis of the hip. Some treatments are based soley upon traditional Chinese medicine. Other treatments are rooted in anatomically-based acupuncture, including trigger points, motor points, and *ahshi* points found in the soft tissue that attach locally and adjacent to the hip joint. These treatments are presented in a four-step, sequential protocol the author suggests both increases clinical effectiveness as well as being inclusive of the many lineages of acupuncture. The ultimate purpose is the integration of traditional Chinese acupuncture with western orthopedic and sports medicine for the benefit of the patient.

#### Points and Techniques

The following points and techniques may be considered in the treatment of the hip pain. This protocol is organized into four steps, an approach I use in sports medicine acupuncture. It makes point selection and needle technique simple, logical, and systematic. Step one and step two include most of the antique points in traditional acupuncture, such as the *jing*-well and *shu*-stream points. Most acupuncture texts will include these distal points for symptomatic treatment.

With step three, treating internal organ imbalances is considered. Again, there is no literature on trials or studies documenting effectiveness of the points and procedures recommended. There are numerous medical perspectives on internal medicine, including diet, and its relationship to arthritic pain. However, it is not the scope of this article to delve into this subject. However, considering *zang-fu* (internal organ) treatment is included in this article as it reflects commonly used treatment protocol in TCM.

And finally, step four details local and adjacent points. While no research exists suggesting these points are effective in treating osteoarthritis of the hip, these points are anatomically significant. Included are both trigger points and motor points, which at times are located precisely at the site of traditional acupuncture points. And anatomically significant tisssues, such as the muscle belly or the

muscle tendon junction, are also included in this step.

## Diagnosis And Assessment Of The Hip

Hip pain, possiblity consisting of buttock, lateral thigh (trochanteric) and anterior inguinal symptoms, is often due to osteoarthritis. It is a common condition seen by the medical practitioner, and in all likelihood, the trend will continue with such a large population of active individuals over the age of 50. Some sources suggest that 10 million Americans have been diagnosed with osteoarthritis. This chronic condition is a degeneration of the articular surface of the joint - a "wear-and-tear" type of injury. The patient presents with hip, gluteal, and thigh pain, with considerable variation of signs and symptoms. There is often a referred pain to the anterior aspect of the pelvis in the inguinal and groin region. This is characteristic and predictable in hip joint arthritis. Limited range of motion and stiffness often accompany pain. Like other cases of chronic arthritis, exercise and weight-bearing activities aggravate the patient, and symptoms are relieved by rest.

When examining the patient, pain is usually reproduced with passive internal rotation of the thigh. The examiner should test hip flexion, as this movement may become limited in patients with hip arthritis. As for imaging, the plain X-ray will show narrowing of the joint space, but cannot show the degeneration of the joint surface--only that it is gone. MRI may help rule out a tear of the labrum or capsular lesions. It is also important to rule out trochanteric bursitis by palpating the bursa at the prominence of the greater trochanter. And of course, differentiate from other possible sources, including referred pain from the lumbar spine and fracture. The examiner should be well aware of the "wrap around pain" seen in upper lumber disc lesions. Night pain often accompanies severe hip osteoarthritis and may be one of the indications for surgical intervention. Hip fracture, especially in the elderly, need to be differentiated. And finally, consider symptoms that may be due to degenerative disc disease of the lower lumber vertebrae.

Acupuncture is an excellent modality to help manage the patient with chronic pain due to an arthritic hip. They usually present with *ahshi* points in the gluteal region. The practitioner will likely palpate the common points of GB 30, GB 29, and closer to the sacrum at Bl 53 and Bl 54. However, do not overlook the predictable ahshi points found at a posterior version of GB 29 (Extraordinary point *Jiankua*), located halfway between the greater trochanter and the crest of the ilium. The point is in the gluteus medius, and deeper, the gluteus minimus. *Jiankua* and the other points may be trigger points as described by Travell and Simons, or Motor Points as described by the work of Matt Callison.

## **Treatment Techniques**

Hip pain due to arthritis is commonly diagnosed as *Bi Zheng* (Bi syndrome). Some practitioners may diagnose hip joint pathology under the category of accident/trauma. The injury is at the level of the tendons, ligaments, and bone. There is *qi* and blood stagnation in the channels and collaterals. The Gall Bladder and possibly the Bladder meridians are involved. While the Spleen, Stomach, and Liver meridians cross the hip joint anteriorly, this pain is referred, and probably best treated by targeting the hip joint. Internal organ imbalances of the Liver and the Kidney frequently contribute.

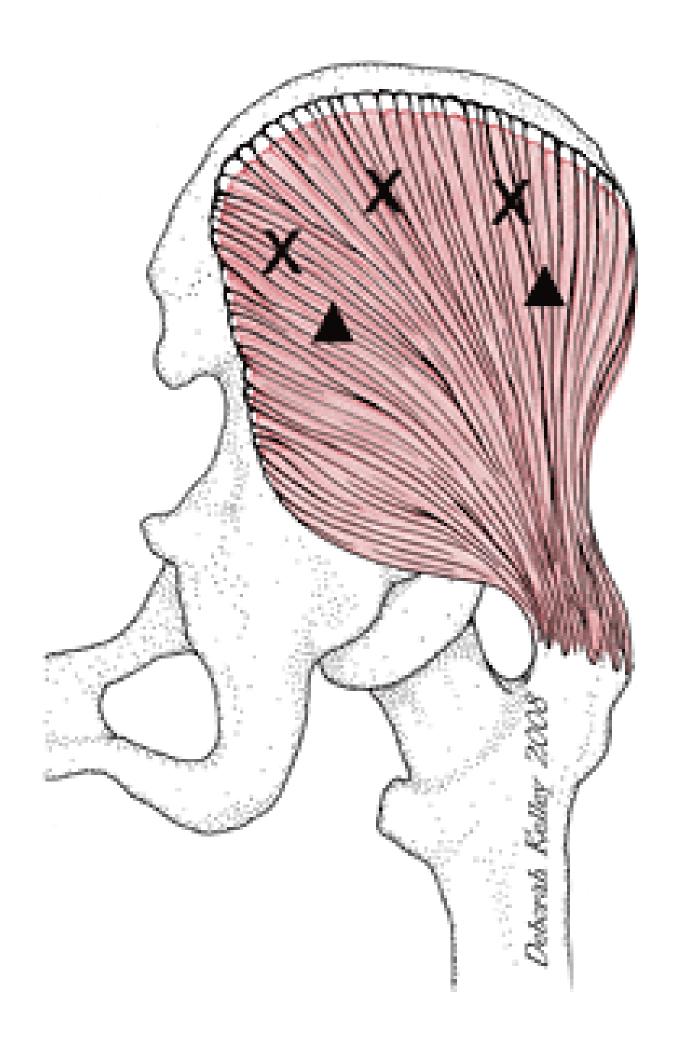
Prognosis: Treat once or twice a week for three to six weeks, then re-evaluate. Ongoing acupuncture treatment is usually necessary, as there is degenerative changes to the *joing*. However, The patient frequently experiences improvement, probably due to treating the soft tissues that generate some of the pain. If the arthritic condition is mild to moderate, the author suggests that up to 75 percent of patients will receive some degree of benefit. Severe arthritis has a much lower success rate, and these

patients may need to be referred to other specialists.

The following are several points and techniques to consider in the treatment of the hip pain. This protocol is organized into four steps, an approach used in sports medicine acupuncture. It makes point selection and needle technique simple, logical, and systematic. And it is both easy-to-understand and inclusive for acupuncturists from differing traditions and backgrounds.

## Step One Treatments:

Using points and techniques that may have an immediate effect on the patient, such as a decrease in pain or an increase in range of motion.



The Tendino-Muscle Meridians

GB 44 - Bleeding technique

The Gall Bladder tendino-muscle meridian does not get deep enough to affect the hip joint. However, bleeding the jing-well point may be effective for some of the soft-tissue symptoms that are generated by the gluteal muscles. Bleed approximately10 drops of blood from the point, obviously using gloves and sterile procedures.

Step Two Treatments:

Using meridian and microsystem points that are NOT located at the site of injury. These are usually distal points, and are chosen based upon the signs and symptoms of the patient.

The Shu-Stream Point Combination:

GB 41 affected side + SJ 3 opposite side

Note: GB 42 is often more sensitive than GB 41, and should be considered as an alternative shu-stream point for this meridian.

This point combination is usually effective when combined with the appropriate local and adjacent points. This system comes from the Master Tong protcol. It emphasizes both the right/left combination as well as the upper/lower combination of points on the same Six Division meridian. The author has considerable experience with this shu-stream protocol.

**Traditional Point Categories** 

Consider the following Gall Bladder Meridian points as distal points to the hip.

GB 40 - Yuan-source point

GB 37 - *Luo*-connecting point

GB 34 - Hui-influential point of tendons

GB 31 - Dispels wind (feng) from the lower extremity

The Extraordinary Meridians

GB 41 + SJ 5 - Activate the Daimai

Arthritis in the hip presents with gluteal imbalances, which may be considered Daimai pathology. Under this step, treatment of Divergent Channels may also be considered.

- Microsystems: Auricular Therapy
- Local: Hip (French), hip (Chinese), plus lumbar spine
- Zang-fu points: Gall Bladder, Liver, Kidney
- Systemic points for pain: Shen men, Thalamus, Adrenal, Endocrine

Step Three Treatments:

Using points that benefit the *qi*, blood, and the *Zang Fu* organs.

There are various internal imbalances seen in the patient with chronic pain due to osteoarthritis of the hip. Points should be determined by the practitioner from both palpation and analysis of the signs and symptoms of the patient.

The following imbalances may be considered.

#### Kidney deficiency

Syndromes of the Kidney are documented in many texts as an internal organ imbalance present in "aging" patients with chronic arthritis and joint degeneration. However, the author suggests that treatment to the Kidney alone rarely is sufficient specifically for arthritis of the hip.

• Liver *qi* stagnation, Liver vin deficiency, and Liver blood deficiency

Liver imbalances may result in Gall Bladder meridian dysfunction, increasing the susceptibility of the hip to inflammation and degeneration.

I have found the following point combination helpful in treatment to the Liver:

#### Liv 3 - Yuan-source point

Supports the Liver in its function of controlling the muscles and tendons

# GB 34 - Hui-influential point of tendons

I have also found treatment to GB 34 on the affected side and Liv 3 on the opposite side is sometimes an effective protcol, influenced by the works of Master Tong and the Taiwanese acupuncturists.

# • Bi syndrome

Hip pain due to osteoarthritis is commonly diagnosed as a Bi syndrome. This diagnosis is primarily useful for herbal prescription, and is not in the scope of this article on the acupuncture treatment of hip pain.

**Step Four Treatments:** 

Using local and adjacent points at the site of injury.

Note: Needle depth is referenced in inches, while surface anatomy and location is referenced in Chinese cun.

Local and adjacent points are usually necessary in the treatment of arthritis of the hip. The gluteus medius and gluteus minimus are the sites of multiple abshi points, and in the author's experirence, the first site to consider acupuncture treatment.

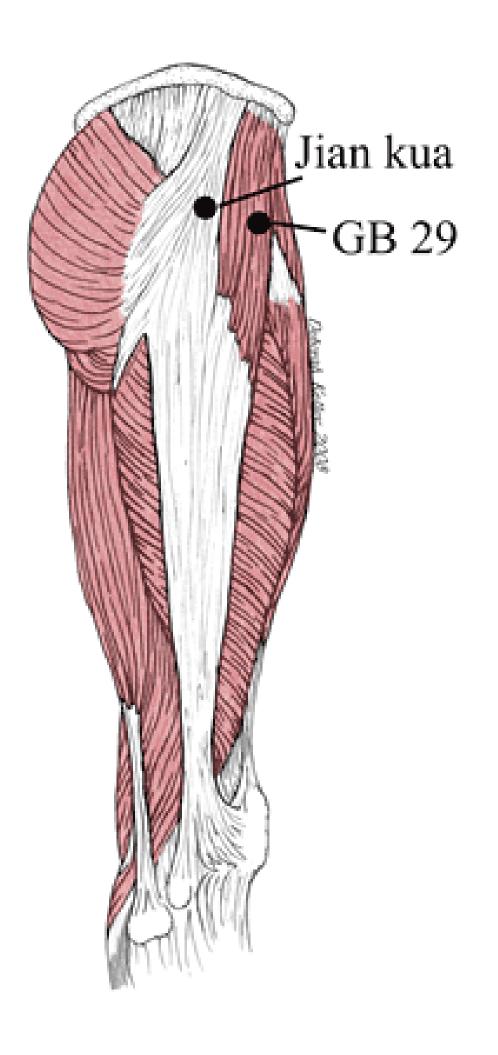
Jiankua ("posterior" GB 29)

The extraordinary point *Jiankua* is located halfway between the greater trochanter and the crest of the ilium. It is approximately two to four cun posterior to the traditional location of GB 29, and is sensitive in virtually all cases of hip joint disease (See Illustration ITband V3). The point is just posterior to the dense muscle tissue of the tensor fascia lata. With deep palpation, the gluteus medius and minimus are

reached. This point anatomically is superior to the hip joint itself, and while it won't enter the joint if needled perpendicular, the author suggests this point may benefit pain and stagnation to these tissues adjacent to the hip joint.

*Jiankua* is needled perpendicularly two to three inches, depending on patient size. Deep needling is necessary, and with care, insertion is generally comfortable for the patient. Consider using two paired points at Jiankua, found with palpation in a zone of pain that is from one to three centimeters in length. The upper point of this zone may include the motor point of the gluteus minimus. It is located three cun superior to the superior border of the greater trochanter. Electrical stimulation between these two paired points often provides significant relief. Also, consider needle-top moxa in the case of Bi syndrome with cold (han).

The importance of the point *Jiankua* needs to be emphasized. It is not a traditional acupuncture point, nor is it a commonly known extraordinary point. However, the point is frequently tender (an *ahshi* point) and is easily found while palpating the hip and gluteal area. I have found that locating this point with precision and needling with proper technique frequently benefits the patient.



Note: Properly position the patient in the lateral recumbent position (side-lying) with a pillow between his or her knees. The painful side is up and they are lying on the unaffected side. Some hip flexion is helpful to get the best access to the point *Jiankua*.

# GB 29 + Jiankua

The texts describe GB 29 as halfway between the greater trochanter and the anterior superior iliac spine. This is a paired point combination using GB 29 with *Jiankua*, the posterior version of GB 29. Consider electrical stimulation between these two paired points, as well as needle-top moxa in cases of Bi syndrome with cold (han).

## Trigger points of gluteus medius and minimus

Treat from one to four sensitive *ahshi* points of the gluteus medius and gluteus minimus muscles (See Illustration GluteusMedius V1). These points are found inferior to the iliac crest over the broad area of the iliac fossa, superior to GB 29 and Jiankua. These points are defined as trigger points in the work of Janet Travell, MD . These two muscles are extremely important, as they contribute to many lumbosacral, hip, pelvic and lower-extremity pain syndromes. And there are no acupuncture points or well-known extraordinary points that lie in these muscles. Fortunately, palpation serves as an excellent guide in point selection.

I would hope for future studies that would support the clinical effectiveness of the protools suggested in this article, as well as similar points and procedures. And most importantly, this is written with the purpose of contributing to the integration of traditional Chinese acupuncture with western orthopedic and sports medicine.

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