

Experiences with W-taping

Yasuo Shimizu

Shimizu Orthopedic Clinic, President

Summary: When W-taping, i.e., double Y-shape tape, was used, it was effective for acute lumbago and sprained ankle joint.

Emphasis of Presentation: Kinesio Taping is a valuable method widely available for clinical practice in orthopedics.

Clinical research report or Basic research report:

The outpatient clinic of orthopedics treats patients of all ages suffering from sports disorders to osteoarthritis. Patients visit this clinic with pain as a main complaint. In Western medicine it is common to immobilize the affected part and to force bed rest, but this does not satisfy patients.

Kinesio Tape instantly removes the pain which inhibits the daily living activities of patients without immobilizing the diseased part. I have frequently used Kinesio Tape in my daily medical care and confirmed that it can be applied for reduction of edema in the knee joint and treatment of fracture. In addition, I obtained better effects by applying a double Y-shaped tape, W-taping, in patients with acute lumbago, sprained ankle joint and pulled muscle. Since W-taping causes more wrinkles in the skin than one Y-shaped tape, it was effective for acute injuries and injuries with intense swelling. In addition, when applying Kinesio Tape to larger muscles, as in lumbago, W-taping is considered to be more effective.

1) Introduction

As is well known, Kinesio Tape is effective generally for sports disorders and musculoskeletal diseases, but it is generally not known at orthopedic clinics visited by most patients. Since I first found out about the Kinesio Taping method of Dr. Kenzo Kase 5 years ago, I have used it on a lot of patients in my outpatient clinic. The efficacy was amazing, and it was a cultural shock for me relying upon western medicine. Since patients respond to the taping on the spot immediately after taping, I can achieve better results with the treatment than ever before, and it has become easier for me to communicate with patients. I have applied the Kinesio taping myself as often as possible, without referring patients to the Rehabilitation Unit. As a result, I realized that Kinesio Tape was effective for hydrarthrosis, for which the fluid would have been removed by arthrocentesis before, and bone fractures that have been immobilized in a cast. At this time, I will report on the efficacy of W-taping mainly for diseases in the orthopedic field.

2) Acute lumbago (herniated disk)

Herniated disk is called Hexenschuss in German, which is translated as "a thrust of a witch," which is accompanied by sudden severe pain. It is caused by a pulled muscle, that is, partial rupture of muscles, slippage of intervertebral articulation and disc herniation, and in western medicine it is generally treated with anti-inflammatory analgesics, poultice and, in severe cases, by lacing a corset after nerve block. In addition, patients are told not to work or play sports and ordered to rest for many days.

For patients, Kinesio Tape it is a real option for treatment without taking off work or stopping sports. Since an advantage Kinesio Tape is that it facilitates the lymph flow while it is applied to the affected site, the therapeutic effects continue and the patient can return to work and sports earlier than expected.

I use W-taping for herniated disk after cooling the affected site with Cryo. Slight to moderate injuries are mostly improved. In severe cases, however, a trigger-point injection is done and then taping is applied.

The action of Kinesio Tape is to improve the sluggish lymph flow by lifting the skin at the affected site slightly, but it is interesting that its principle is quite opposite to that of the conventional immobilization in a corset. Additionally, I have found that Kinesio Tape is effective for spinal canal stenosis, commonly observed in the elderly, and sciatic nerve-associated herniated disk. I also used Kinesio Tape for osteoporosis and its associated compression fractures of the vertebra at the time of rehabilitation, which was well received by patients.



Before Treatment



W-taping for herniated disk



After Treatment

3) Kinesio Taping for the treatment of fracture

Kinesio Tape is very effective for fractures in the feet. Fractures in the feet, particularly distal phalanx and middle phalanx, cannot be immobilized completely in a cast or ALFENS-SINE and, on the contrary, I feared that immobilization might rather have markedly harmful effects on patients. Kinesio Tape is able not only to relieve the pain of fracture but also to minimize the discomfort in daily life until the fracture heals. In the case of a fracture of the metatarsal bone, any severe dislocation requires a cast, but with little or no dislocation it can be treated sufficiently with Kinesio Tape. For patients, the hardship is less than with a cast, and there are several advantages, including that they can bathe, put their shoes on and attend school or work, and the interference with daily life is minimized.

In the case of a costal fracture, application of Kinesio Tape is not as painful compared with the treatment in which the body is tightened by a conventional band fixation, and the pain at the time of action is also reduced markedly.

4) Treatment of joint sprain

Ankle joint sprain is an injury observed frequently by orthopedists, but it is still treated by immobilization with an inflexible tape after applying underwrap. However, this not only produces circulatory disturbances and joint contracture but also does not reduce pain. For a slight sprain, Kinesio Tape can relieve pain at the joint and allow the patient to return to sports. For an ankle sprain in children, particularly, swelling is eliminated and pain is markedly reduced after applying the tape. Of course, immobilization is inevitable in cases of severe sprain or ligament injury, but the rehabilitation period will be shortened if Kinesio Tape is used after immobilization.

In addition, Kinesio Tape was effective for the treatment of knee joint sprain and medial collateral ligament injury.



Swelling of the lateral malleolar region of the sprained ankle joint
Treatment with W-Taping
Swelling disappeared after 4 days.

5) Kinesio Taping treatment for pulled muscle

Pulled muscle commonly occurs in the gastrocnemial muscle and biceps femoris muscle while playing sports, and is generally treated by applying a poultice, immobilizing with a pressure bandage and rest. For a slightly pulled muscle, however, the patient can return to daily activities and sports by applying Kinesio Tape. The conventional compression treatment can aggravate circulatory disturbances and delay recovery. Kinesio Tape is an effective therapeutic method because it removes edema and hematoma rapidly and reduces the pain. I always use the W-Taping for pulled muscles.



Pulled gastrocnemial muscle (accompanied by internal bleeding)

W-Taping

6) Treatment of apophysiopathy in children

Apophysiopathy commonly occurs in patients with Osgood-Schlatter disease. In addition, ankle apophysiopathy also occurs, and it is generally advisable to treat both injuries by applying a poultice and rest, but Kinesio Tape reduces pain and enables the patient to return to sports.

7) Treatment of osteoarthritis and hydrarthrosis

Many patients visiting the outpatient unit of the orthopedic clinic are elderly, and they particularly have symptoms of osteoarthritis. In the course of treatment, I found that Kinesio Tape not only relieves the pain but also reduces hydrarthrosis. It is obvious for patients that improvement by taping is much better than drainage using large needles. In addition, since Kinesio Taping is also effective for bursitis-induced edema, it is worth trying Kinesio Taping once. Kinesio Taping is also used for the treatment of spurs of the calcaneal bone and plantar fasciitis commonly observed in the planta pedis.



Swelling of the lateral malleolar region of ankle joint bursitis
Treatment with Kinesio Taping
Swelling disappeared after 2 weeks of treatment.



Fracture of the proximal phalanx of the fourth finger
Treatment with Kinesio Taping
Complete cure after 3 months



Immobilization with ALFENS-SINE

As described above, Kinesio Tape is not necessarily used for all injuries in the orthopedic field, but I feel that it is a considerably effective tool for the treatment of the diseases observed in the outpatient unit. Particularly, I am often surprised that Kinesio Tape is so effective in treating herniated disk. Most patients come to the orthopedic clinic with pain as the main complaint. It is considered a mission for us, practitioners, to relieve the pain, a main complaint, first. In addition, it is easy to recommend that patients rest, but we have to understand that patients come to the hospital for relief of pain and to return to their work and sports as soon as possible. Kinesio Taping is an effective tool to shorten the time from relief of pain to return to daily activities, and we want to make an effort to satisfy patients further in the future.