Kinesio Taping
Muscle Anatomy and Basic Tape Application
Why Kinesio Tape?

The method of kinesio taping is derived from the science of kinesiology and uses the body’s own natural healing process by recognizing the importance of body and muscle movement in everyday life and rehabilitation.

Since so much attention was given to muscle function it was discovered that by using elastic tape we could help the muscles with outside assistance.

For the first 10 years, orthopedists, chiropractors, acupuncturists and other medical practitioners were the main users of KT.

Today KT is accepted by medical practitioners and athletes in Japan, the United States, Europe, South America, Australia and other Asian countries.

http://www.kinesiotape.ca/certification.htm

KT Tex Tape in conjunction with a ‘lymphatic’ technique from the KT method increased circulation within 12 hours around the knee area.

http://www.kinesiotape.ca/certification.htm
Muscles attribute to the movement of the body and control the circulation of venous and lymph flows, as well as body temperature. Failure of muscles to function properly may cause different health issues.
When muscles over-extend or over-contract beyond normal range of motion they cannot recover and become inflamed. When a muscle is inflamed, swollen or stiff due to fatigue, the space between the skin and muscle is compressed. This constricts the flow of lymphatic fluid.
Conventional Taping vs. Kinesio Taping

Conventional athletic tape is designed to constrict and immobilize movement of affected muscles and joints. Several layers of tape must be rolled around and/or over the afflicted area. This results in the application of pressure which restricts the flow of bodily fluids and creates an undesirable side-effect. This is usually why athletic tape is applied directly BEFORE an event and IMMEDIATELY removed prior to the event.

Kinesio tape is designed with an elasticity of 130-140% and gives the muscle complete free range of motion. This allows the body to function while healing itself at the same time.
Four Major Functions

1. Supports the Muscle:
   - Improves muscle contraction in weakened muscle
   - Reduces muscle fatigue
   - Reduces over extension and over contraction
   - Reduces cramping and possible injury to muscle
   - Increases ROM
   - Relieves pain

2. Removes Congestion to Flow of Body Fluids:
   - Improves blood and lymphatic circulation
   - Reduces excess heat and chemical substances in tissue
   - Reduces inflammation
   - Reduces abnormal feeling and pain in skin and muscle

3. Activates Endogenous Analgesic System:
   - Possible activation of spinal inhibitory system
   - Possible activation of descending inhibitory system

4. Corrects Joint Problems:
   - Adjusts misalignment caused by spasm and shortened muscle
   - Normalizes muscle tone and abnormality of fascia in joints
   - Improves ROM
   - Relieves pain
How to Apply KT

Recommended elasticity of tape should be 130-140%

For overused or an acutely damaged muscle:

• Tape is to be applied with NO TENSION
• INSERTION TO ORIGIN
• Skin must be stretched before application
• When skin and muscles contract back to normal position after tape application the tape will form convulsions on the skin, thus lifting the skin and the flow of blood and lymphatic fluid increases

http://www.tigerlily studios.com/kinesio-tape.php
How to Apply KT cont...

For chronic or acutely weak muscles, where support with full range of motion is needed:

- Tape is applied from ORIGIN TO INSERTION
- The area, joint, or muscle is placed in an elongated position as before but with LIGHT TENSION

In the case of joint or ligament damage:

- Tape should be applied with medium to full STRETCH
Shoulder Girdle
Pectoralis Major

Origin

*Clavicular Head:*
Anterior surface of medial half of clavicle

*Sternocostal Head:*
Anterior surface of sternum, superior six costal cartilages, and aponeurosis of external abdominal oblique muscle

Insertion
Crest of bicipital groove of humerus

Nerve  C5-C8, T1
Medial and Lateral pectoral nerves

Function
- Adduct and internally rotate the humerus
- Clavicular head flexes and adducts the arm
- Sternocostal head adducts the arm and extends the arm from a flexed position
Tape Specifications

- 2 inches in width
- 6-7 inches in length
- ‘Y’ Shaped tape

Clinical Application

- Shoulder girdle complaints
- Pain in the hand
- Numbness
- Bronchitis
- Asthma
- Chest pain

How to Adhere

1. Externally rotate shoulder and apply the Y-base to region of bicipital groove.
2. With shoulder in external rotation, extend arm to adhere tape tails to surround clavicular and sternocostal heads.
Rhomboid Major

**Origin**
Spinous Process of T2-T5 vertebrae

**Insertion**
Medial border of scapula from level of spine to inferior angle

**Nerve C4-C5**
Dorsal scapular nerve

**Functions**
- Retract or adduct scapula/rotate glenoid cavity downward
- Helps correct posture in conjunction with pectoralis minor
- Helps fix scapula to the thoracic wall
- Injured/inflamed rhomboid major can cause pain to sternocostal portion of pectoralis major
How to Adhere:

1. Have patient extend upper arm slightly and extend shoulder backwards to expose scapula. Holding both ends of “X” tape, place over the belly of the rhomboid major.
2. Next, patient’s arm is horizontally adducted across the front of the body reaching thumb toward opposite hip. Scapula should be protracted and in a slightly downward position. Apply tape tails WITHOUT stretch.

Tape Specifications
- 2 inches in width
- 5 inches in length
- X-Shaped Tape

Clinical Application
- Scapulae Pain
- Rib subluxation
- Stiff shoulder
Deltoid

Origin
*Anterior Fibers*: anterior border and upper surface of the lateral 1/3 of the clavicle
*Middle Fibers*: Lateral border and upper surface of the acromion process
*Posterior Fibers*: Posterior border of the spine of the scapula

Insertion
Deltoid tuberosity of humerus; sensitive area about halfway down arm bone

Nerve C5, C6
Axillary Nerve

Function
- Major abductor of the humerus when entire deltoid contracts
- Anterior fibers cause flexion and internal rotation; middle fibers cause abduction, and posterior fibers cause extension and external rotation
- Abduction becomes difficult when deltoid is weakened by injury to C5-C6 spinal nerve roots or to the axillary nerve; bronchitis, pleurisy, influenza or other lung conditions have an influence on the deltoid muscle
Deltoid cont...

Tape Specifications

2 inches in width
8 inches in length
Y-Shaped Tape

Clinical Application

• Chronic shoulder dislocation
• Acromio-clavicular dislocation

How to Adhere

1. Using a “Y” tape, adhere base of “Y” to insertion of deltoid muscle. Abduct shoulder and apply tape to anterior fibers of the deltoid.
2. Next, internally rotate and adduct shoulder to touch thumb to opposite shoulder.
Triceps Brachii

Origin

*Long Head*
Infraglenoid tubercle of scapula

*Lateral Head*
Posterior surface of humerus, inferior to greater tubercle;

*Medial Head*
Posterior surface of humerus, inferior to radial groove

Insertion
Olecranon process of ulna

Nerve C6-C8
Radial nerve

Function
- Extends the arm (long head) and forearm (long, lateral and medial heads)
- Long head also steadies the abducted humeral head
Triceps Brachii cont...

Tape Specifications

2 inches in width
10-12 inches in length
‘X-Shaped’ tape

Clinical Application

• Deformity of elbow joint
• Tennis elbow pain on elbow flexion

How to Adhere

1. Arm flexed to 45 degrees elbow extended. Point of upper tail attachment to tape base placed over tip of olecranon process. As elbow is gradually flexed to 90 degrees, tape base applied over elbow joint and lower tape tails adhered to forearm.
2. With arm and elbow moderately flexed, ends of tape tails adhered to acromion, then tape tails applied as arm and forearm are fully flexed.
Biceps Brachii

**Origin**
*Short Head*
Coracoid process  
*Long Head*
Supraglenoid tuberosity of scapula

**Insertion**
Bicipital tuberosity of radius (radial tuberosity); fascia of forearm via bicipital aponeurosis

**Nerve C5-C6**

**Function**
- Supinates forearm
- Flexes forearm on the humerus while supinated
- Flexes the arm
Biceps Brachii cont...

**Tape Specifications**

- 2 inches in width
- 10 inches in length
- ‘X-Shaped’ Tape

**Clinical Application**

- Tennis elbow or pain during elbow extension
- Biceps tendonitis
- Rupture of the long head tendon as seen in baseball pitchers and person who perform heavy labor

**How to Adhere**

1. With elbow in slight flexion, adhere base of tape across cubital fossa. Apply lower tape tails to forearm.
2. With arm in external rotation and extension, apply medial upper tape tail being careful to not place tape within the axilla, and lateral upper tape tail is adhered along lateral border of biceps brachii muscle.
Rhomboid Minor

**Origin**
Nuchal ligament and spinous process of C7-T1 vertebrae

**Insertion**
Medial border of scapula at level of scapular spine

**Nerve C4-C5**
Dorsal scapular nerve

**Function**
- Retract or adduct scapula and rotate glenoid cavity downward
- Fix scapula to thoracic wall
Rhomboid Minor cont...

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<tr>
<th>Tape Specifications</th>
<th>Clinical Application</th>
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<tbody>
<tr>
<td>1 inch in width</td>
<td>• Pain between upper section of scapulas</td>
</tr>
<tr>
<td>4 inches in length</td>
<td>• Stiff shoulder</td>
</tr>
<tr>
<td>‘I’ Shaped Tape</td>
<td></td>
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</tbody>
</table>

How to Adhere

1. Flex elbow to 90 degrees and abduct arm to shoulder level, then horizontally adduct to scapular plane, approximately midway between abduction and flexion. Lightly adhere tape from C7-T1 vertebral spines to medial border of scapula at level of scapular spine.
2. Patient’s thumb reaches toward opposite hip, then adhere tape firmly to skin.
Teres Major

**Origin**
Posterior surface of inferior angle of scapula

**Insertion**
Medial border of bicipital groove of humerus

**Nerve C6, C7**
Lower subscapular nerve

**Function**
- Adduction and internal rotation of arm
- Tape can improve shoulder flexion and abduction; activities such as pushing, throwing and hitting are strongly influenced by teres major.
Tape Specifications

1 inch in width
6 inches in length
‘I’ shaped tape

Clinical Application

• Frozen shoulder
• Shoulder pain aggravated by golf, tennis or baseball

How to Adhere

1. Flex elbow slightly and abduct arm to about 45 degrees. In this position, affix tape gently to origin and insertion of teres major.
2. Abduct arm to 90 degrees and move arm into horizontal adduction. At point where teres major is at maximum stretch, completely adhere tape.
Brachioradialis

Origin
Lateral supracondylar ridge of humerus.
Lateral intermuscular septum.

Insertion
Front base of styloid process of radius

Nerve C5-C7
Radial nerve

Function
• Strong flexor of the forearm
• Acts as either a supinator or pronator of the forearm; most commonly a supinator
Brachioradialis cont...

Tape Specifications

- 2 inches in width
- 6-7 inches in length
- ‘I’ or ‘Y’ Shaped tape

Clinical Application

- Writer’s cramp
- Pain along the brachioradialis

How to Adhere

1. Supinate forearm and flex elbow to about 45 degrees. Adhere tape base to origin of brachioradialis muscle.
2. As the elbow gradually straightens the tape is placed toward the muscle insertion. At almost maximum extension the tape is adhered.
Pronator Quadratus

**Origin**
Lower fourth of the anterior surface of ulna

**Insertion**
Lower fourth of the anterior surface of radius

**Nerve** C8, Th1

**Function**
- Pronates the forearm
- Bind the ulna and radius together
Pronator Quadratus cont...

**Tape Specifications**

1 inch in width
7-8 inches in length
‘I’ shaped tape

**Clinical Application**

- Pain on internal rotation of forearm and/or wrist
- Carpal tunnel syndrome

**How to Adhere**

1. Fully supinate forearm. Adhere the tape to the base of the thumb.
2. As the forearm is gradually brought into pronation, apply tape over the dorsum of the wrist and spiral towards the anterior forearm. Adhere the tape towards the lateral humeral epicondyle to finish.
Trunk
Erector Spinae

**Origin**
Posterior sacrum, iliac crest, sacrotuberous ligament, dorsal sacroiliac ligament, spinous processes of T11-L5 vertebrae and their interspinous ligaments, and thoracolumbar aponeurosis

**Insertion**
Angles of ribs, transverse processes of superiorly located vertebrae

**Nerve**
Dorsal branch of spinal nerve

**Function**
- Extend vertebral column which is of major importance for upright posture and ability to move the body forward
- Laterally bend the trunk
Erector Spinae cont...

Tape Specifications
2 inches in width
11 inches in length
Y-shaped tape

Clinical Application
• Lumbar pain symptoms
• Lumbar disc hernia
• Lumbar deformation
• Inflammation of floating ribs

How to Adhere

1. With patient standing, adhere the base of the tape over the sacrum. As client gradually bends forward, apply one of the tape tails along the course of the muscle.
2. Keep approximately 5-10” separation between tails of tape. Apply 2\textsuperscript{nd} tape tail in the same manner along the course of the muscle to finish.
**Latissimus Dorsi**

**Origin**
Spinous processes of last 5 or 6 thoracic vertebrae, thoracolumbar fascia, outer lip of iliac crest. Last 3 or 4 ribs. Spinous processes of sacrum and inferior angle of scapula.

**Insertion**
Posterior lip of bicipital groove of humerus.

**Nerve C6-C8**
Thoracodorsal (middle-subscapular) nerve

**Function**
- Adduction and internal rotation of the shoulder joint
- Pulls the humerus and scapula inferiorly
Latissimus Dorsi cont...

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<tr>
<th>Tape Specifications</th>
<th>Clinical Application</th>
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<tr>
<td>2 inches in width</td>
<td>• Thoracic pain</td>
</tr>
<tr>
<td>16 inches in length</td>
<td>• Idiopathic scoliosis</td>
</tr>
<tr>
<td>‘I-shaped’ Tape</td>
<td>• Frozen shoulder</td>
</tr>
</tbody>
</table>

How to Adhere

1. Apply tape base to region of spinous processes of the 3rd to 4th lumbar vertebrae of the involved side. Gradually flex trunk away and apply tape along course of muscle belly.
2. With elbow extended, fully flex and externally rotate shoulder. Adhere the tape to the lesser tubercle of humerus.
Trapezius: Upper

**Origin**
External occipital protuberance, medial 1/3 of superior nuchal line of occipital bone, ligamentum nuchae

**Insertion**
Lateral 1/3 of posterior surface of clavicle

**Nerve C2-C4**
Spinal accessory nerve

**Function**
- Fibers of the superior region of upper trapezius help in raising the upper extremity
- Inferior region helps raise the extremity while adducting and upwardly rotating the scapula
- When carrying objects, the upper trapezius works to support the distal end of the clavicle and acromion
Trapezius Upper cont...

Tape Specifications

1 inch in width
9-10 inches in length
‘I or Y’ shaped tape

Clinical Application

• Cervical disc hernia
• Cervical and brachial symptoms
• Stiff shoulder
• Cervical sprain

How to Adhere

1. Flex the neck to about 45 degrees and adhere base of tape to skin just below the hair line. Apply other end of tape to acromion while rotating the head toward the involved side.

2. To relax upper trapezius, adhere base of tape to acromion, rotate head toward the involved side, then apply remainder of tape along course of muscle fibers toward hair line.
Trapezius: Middle

**Origin**
Posterior longitudinal ligaments. Spinous processes of 7th cervical and upper thoracic vertebrae

**Insertion**
Superior lip of spine of scapula

**Nerve C2-C4**
Spinal accessory nerve

**Function**
- Assists in adduction of the scapula
- If middle trapezius becomes weakened, then as the upper limb is raised the scapula slides laterally
Trapezius Middle cont...

Tape Specifications

2 inches in width
10 inches in length
‘Y’ Shaped Tape

Clinical Application

- Cervical disc hernia
- Cervical and brachial symptoms
  - Stiff shoulder
  - Cervical sprain

How to Adhere

1. Adhere base of tape posterior to acromion process.
2. Flex elbow to 90 degrees and raise elbow to shoulder level. Horizontally adduct humerus to front of body and apply tape along course of muscle fibers toward spinous processes of C6 to T3 to finish.
Trapezius: Lower

**Origin**
Supraspinous ligaments and spinous processes of lower 7 thoracic vertebrae

**Insertion**
Upper border and tuberosity at base of spine of scapula

**Nerve C2-C4**
Spinal accessory nerve

**Function**
- Assists in upward rotation of the scapula
- Depresses and adducts the scapula
- When lower trapezius is not working, the scapula is not stabilized and there is not sufficient upward rotation of the glenoid for full flexion of the humerus
**Trapezius Lower cont...**

**Tape Specifications**
- 2 inches in width
- 12 inches in length
- ‘Y’ shaped tape

**Clinical Applications**
- Cervical disc hernia
- Cervical and brachial symptoms
  - Stiff shoulder
  - Cervical sprain

**How to Adhere**

1. Fix base of tape on the medial end of the spine of the scapula. Fully extend the shoulder and retract scapula.
2. Apply the end of upper tape tail at T4 level of vertebral column and that of lower tape tail at T12 spinous process. Then adduct arm across front of body, and side bend upper trunk to opposite side to affixed tape tails.
Pelvic Girdle
Quadriceps Femoris

Origin

*Rectus Femoris:*
Anterior inferior iliac spine, groove above acetabulum

*Vastus Intermedius:*
Upper 2/3rd of anterior surface of shaft of femur

*Vastus Medialis:*
Distal half of intertrochanteric line, medial hip of linea aspera and proximal part of medial supracondylar line

*Vastus Lateralis:*
Upper half of intertrochanteric line, anterior and inferior rim of greater trochanter, lateral lip of gluteal tuberosity, proximal half of lateral lip of linea aspera

Insertion

Base of patella

Nerve L2-L4

Femoral nerve

Function

- Strong extensor of the knee
- Rectus femoris traverses 2 joints; moves 2 joints
**Quadriceps Femoris cont...**

**Tape Specifications**
- 2 inches in width
- 10-12 inches in length
- ‘I’ Shaped Tape

**Clinical Application**
- Visceroptosis
- Mid-back ache

**How to Adhere**

1. Supine with knee extended. Adhere base of tape to the belly of quadriceps femoris and line tape up towards patella. Separate two tape tails of “Y”.
2. Flex knee and adhere tape tails around patella to finish at tibial tuberosity.
Hamstrings

Origin
Semimembranosus:
Ischial tuberosity
Semitendinosus:
Ischial tuberosity
Biceps Femoris:
LONG HEAD: Ischial Tuberosity
SHORT HEAD: Linea aspera

Insertion
Semimembranosus:
Posterior part of medial tibial condyle
Semitendinosus:
Anteromedial part of proximal tibia
Biceps Femoris:
Fibular Head

Nerve L5, S1, S2
Tibial nerve
Common peroneal nerve

Function
• Extension of the thigh and flexors of the knee joint
• Internal and external rotation of the leg
• When thigh and leg is flexed these muscles can also extend the trunk
• Stabilize the lumbar region
Hamstrings cont...

Tape Specifications

2 inches in width
10-18 inches in length
‘Y’ shaped tape

Clinical Application

• Internal derangement of the knee
• Osteoarthritis of the knee
• Damage to the tibial collateral ligament
• Damage to the semi-lunar cartilage

How to Adhere

1. With patient prone, knee moderately flexed and hip somewhat extended. Adhere tape base of proximal thigh in line with ischial tuberosity. As knee is gradually extended, apply tape tail to one side of knee.
2. Return knee to flexed position. As knee is gradually extended, adhere 2nd tape tail to the other side of knee.
Gluteus Maximus

Origin
Ilium behind posterior gluteal line.
Posterior surface of sacrum and coccyx.
Sacrotuberous ligament.

Insertion
Iliotibial band of fascia lata.
Gluteal ridge of femur.

Nerve L5, S1, S2
Inferior gluteal nerve.

Function
• Extensor of the buttocks
• Strong external rotator of the femur.
• Upper 1/3 of the muscle may be used for abduction
• Lower 2/3 function to adduct the femur
• Active when used to rise from a seated position or climbing stairs
Gluteus Maximus cont...

Tape Specifications
2 inches in width
12 inches in length
‘Y’ Shaped tape

Clinical Application
• Lumbago
• Sciatica
  • Coxitis (inflammation of hip joint)
  • Inflammation of sacro-iliac joint

How to Adhere

1. With patient in sidelying, place base of tape with point of “Y” at greater trochanter. Abduct thigh and adhere anterior tape tail as femur is gradually lowered to starting position.

2. Flex femur, allow to internally rotate and adduct onto supporting surface of table then adhere posterior tape tail towards apex of sacrum to surround gluteus maximus muscle belly.
Gluteus Medius and Minimus

**Origin**
Dorsal section, external surface of ilium between iliac crest and posterior gluteal line, the ventral section, anterior gluteal line. Gluteal aponeurosis.

**Insertion**
Oblique ridge of lateral surface of greater trochanter of femur

**Nerve L5-S1**
Superior gluteal nerve

**Function**
- Abduction of the femur
- Internally rotate the femur
- Primary function is to keep the pelvis level when the opposite leg and foot are raised
- Assist in flexion of the femur (anterior fibers) while posterior fibers help in extension
Gluteus Medius and Minimus cont...

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<th>Tape Specifications</th>
<th>Clinical Applications</th>
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<tr>
<td>2 inches in width</td>
<td>• Inflammation of the hip joint</td>
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<tr>
<td>7 inches in length</td>
<td>• Congenital dislocation of the hip joint</td>
</tr>
<tr>
<td>‘Y’ shaped tape</td>
<td>• Status post total hip arthroplasty</td>
</tr>
</tbody>
</table>

How to Adhere

1. In the same manner as in gluteus maximus taping, adhere base of “Y” tape to greater trochanter. The anterior tape tail is affixed as the abducted hip is lowered to starting position.
2. Posterior tape tail is applied when the femur is allowed to internally rotate and adduct onto supporting surface of table.
Tensor Fascia Lata

**Origin**
Anterior superior iliac spine and anterior part of iliac crest

**Insertion**
Lateral condyle of tibia by means of iliotibial tract

**Nerve L4, L5**
Superior gluteal nerve

**Function**
- Stabilizes the hip joint and steadies the trunk on the thigh
- Muscle abducts, internally rotates and flexes the thigh
- Helps keep the knee extended
Tensor Fascia Lata cont...

Tape Specifications

- 2 inches in width
- 8 inches in length
- ‘I’ shaped tape

Clinical Application

- Intervertebral disc herniation
- Inflammation of the hip joint
- Irritation of the lateral knee joint
- Sciatica from the upper lumbar vertebrae

How to Adhere

1. Patient in side lying with hip abducted. Affix one end of the tape to iliac crest.
2. Adhere tape so that it passes over the greater trochanter. While gradually adducting leg, adhere tape at the point of maximum adduction.
Sartorius

Origin
Anterior superior iliac spine and superior half of notch just inferior to it

Insertion
Proximal part of anterior and medial surface of tibia

Nerve L2, L3
Femoral nerve

Function
- The sartorius flexes, abducts and externally rotates the thigh at the hip
- Helps flex the leg at the knee joint
- Flexes and internally rotates the knee joint
- When weakened it causes angling of the pelvis and knee pain (seen in medial part of the knee joint)
Sartorius cont...

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<tr>
<td>1 inch in width</td>
<td>• Hip joint conditions</td>
</tr>
<tr>
<td>18 inches in length</td>
<td>• Knee conditions</td>
</tr>
<tr>
<td>‘I’ shaped tape</td>
<td></td>
</tr>
</tbody>
</table>

How to Adhere

1. Patient in supine, propped on elbow, hip abducted and in external rotation, hip and knee in moderate flexion. Adhere tape base to region of proximal part of medial surface to tibia, medial border.
2. Tape is angled toward ASIS and applied as hip is brought into internal rotation, and hip and knee are gradually extended.
Piriformis

Origin
Anterior surface of sacrum within the pelvis, and sacrotuberous ligament

Insertion
Superior border of greater trochanter of femur

Nerve S1-S2
Nerve to piriformis

Function
• External rotation and extension of the hip
• Acts with the obturator internus, superior and inferior gemellae, and quadratus femoris to steady the head of the femur in the acetabulum
• When weakened it can have adverse effects of the sciatic nerve due to the fact that in 15%-20% of people, sciatic nerve components pass through the muscle as they make their way into the buttock
Piriformis cont...

### Tape Specifications
- 2 inches in width
- 6 inches in length
- ‘Y’ shaped tape

### Clinical Application
- Piriformis syndrome
- Hip joint conditions
  - sciatica

### How to Adhere
1. The patient lies on side, knee flexed to 120 degrees, and hip abducted. First adhere the base at greater trochanter. Next adhere one end of tape towards sacrum.
2. With remaining end of tape, point toward lower buttocks and slightly abducting hip. While flexing hip towards chest, affix tape.
Soleus and Gastrocnemius

**Origin**

*Soleus:*
Posterior surface of head of fibula; proximal 1/3 of posterior surface of fibula; soleal line and medial border of tibia  

*Gastrocnemius:*
*LATERAL HEAD:* Lateral condyle and posterior part of medial condyle  
*MEDIAL HEAD:* Proximal and posterior part of medial condyle

**Insertion**
Posterior surface of calcaneus by means of Achille’s tendon

**Nerve S1, S2**
Tibial nerve

**Function**
- Strong invertors of the ankle and foot
Soleus and Gastrocnemius cont...

**Tape Specifications**

- 2 inches in width
- 12 inches in length for soleus
- 15-20 inches in length for gastrocnemius
- ‘Y’ shaped tape

**Clinical Application**

- Inflammation of the Achille’s tendon
- Ankle conditions
- Pain on the plantar surface of the heel

**How to Adhere**

1. Patient in prone with knee flexed, or in hands-and-knees position to allow plantar surface of foot to be seen easily. First, adhere base of tape to plantar surface of heel. Adhere tape over Achille’s tendon as ankle is dorsiflexed.

2. While maintaining ankle dorsiflexion, apply tape tails to posterior surface of leg to surround soleus and gastrocnemius muscle complex to finish.
Extensor Hallucis Longus

**Origin**
Middle part of anterior surface of fibula and interosseous membrane

**Insertion**
Dorsal aspect distal phalanx of great toe

**Nerve L5, S1**
Deep peroneal (fibular) nerve

**Function**
- Assists in extension of both joints in big toe
- Assists anterior tibialis muscle in ankle dorsiflexion and inversion
Extended Hallucis Longus cont...

Tape Specifications

1 inch in width
14 inches in length
Y-Shaped tape

Clinical Application

• Sprained ankle
• Osteoarthritis of the ankle

How to Adhere:

1. Dorsiflex ankle as far as you can and plantar flex the great toe. Start by applying “V” section of tape to the great toe. Plantar flex ankle as far as you can and apply tape up the foot.
2. Return ankle to dorsi flexed position, line tape up along tibialis anterior. Next, with ankle plantar flexed completely, adhere tape.
Flexor Hallucis Brevis

**Origin**
Plantar surfaces of cuboid and lateral cuneiform bones

**Insertion**
Medial and lateral parts of base of proximal phalanx of great toe

**Nerve S2, S3**
Medial Plantar Nerve

**Function**
- Flexes proximal phalanx of 1st toe
- Necessary in maintaining balance and supports the arch
Flexor Hallucis Brevis cont...

Tape Specifications

1 inch in width
6-7 inches in length
‘Y’ shaped tape

Clinical Application

• Pain in the base of the heel
• Pain in arch
• Dropped arch
• Turf toe in athletes

How to Adhere

1. The patient is prone, knee flexed and sole of foot facing up. Firstly wrap the “V” section around great toe.
2. Next, hyperextend great toe from metatarsophalangeal joint. Affix tape to posterior aspect of heel to finish.
How Elasticity Works with the Lymphatic System

**Skin:** The elasticity of the tape can be applied on the skin in a manner that causes a massage-like skin movement that directs lymph away from an area. When placed over areas of fibrosis, the lifting action and increased movement of skin assists in softening these tissues.

**Muscle:** The motion of the tape during exercise stimulates the sensory receptors in the skin and can improve muscle contraction. Deeper lymphatic vessel function is enhanced by the nearby pumping action of muscle contraction and relaxation.

**Circulation:** As the tape affects the muscles and skin it also improves the ability of blood to flow in and out of the treated area by creating pressure changes. This improved circulation aids in healing.

**Neurological:** Swelling places pressure on sensory receptors in the skin causing pain, numbness or reduced sensitivity. When excess fluid is removed the pressure is reduced and the ability of these receptors to communicate with the brain is improved.

**Respiratory:** Thoracic pressure changes draw lymph from the extremities using a vacuum effect. A special taping for the diaphragm can improve respiratory capacity by increasing expiratory volume.

http://www.stepup-speakout.org/kinsiotaping_for_lymphedema.htm
Taping and Lymphedema

Taping can be very helpful as an adjunct to hands-on lymphedema treatments and compressive therapy as provided by a qualified lymphedema therapist.

It is particularly useful in the reduction of trunk, head and neck lymphedema for which compression therapy is difficult or not appropriate.

The application of elastic tape on the trunk can also assist in the reduction of extremity lymphedema.

Taping can help to soften fibrosis and can also be used in combination with compression therapy and skilled treatment.

A word of caution: Although tape is available for sale online, experimenting with its use in treating lymphedema is not a do-it-yourself activity. There are specific reasons as to why, how, and where the tape is placed. You need training and supervision in the use and application of this tape by a trained lymphedema therapist. Following this a family member or friend can continue to apply the tape at home.

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Questions? Review?