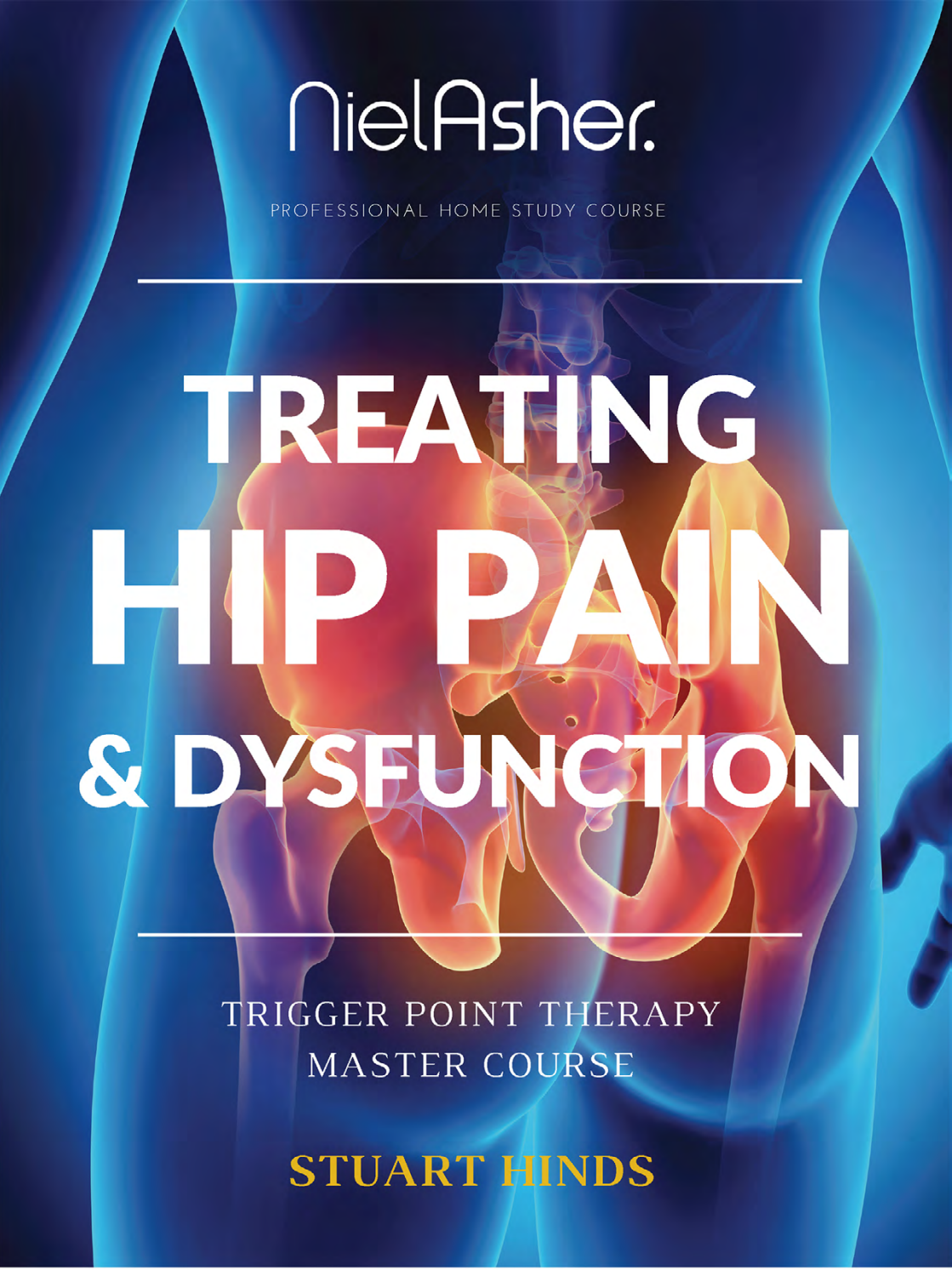
NielAsher.

PROFESSIONAL HOME STUDY COURSE

TREATING HIP PAIN & DYSFUNCTION



TRIGGER POINT THERAPY
MASTER COURSE

STUART HINDS

NAT Pro Series:

Treating Hip Pain & Dysfunction With NAT

Trigger Point Therapy Course

STUART HINDS

WELCOME

I am delighted and excited to share these Hip Treatment techniques with you. This approach was born out of the principles of the Niel-Asher Technique (NAT) as it is applied to shoulder dysfunctions.

Let's not forget that the hip is the back shoulder in a quadruped!

Hip pain is both common and debilitating, especially in athletes or people who demand high performance. Over my 20+ years career I have seen countless patients with hip pain and have often been frustrated by the lack of progress I could make.

Sure, freeing the soft tissues seems to offer temporary relief, but then the client would return again and again without any real progress.

NOW this has all changed. After using the techniques described in this course for a number of years, I and my colleagues have learned how to affect changes that are both profound and long lasting.

These changes don't just improve the Hip alone but all of the associated soft tissues and the Lumbar spine mechanics.

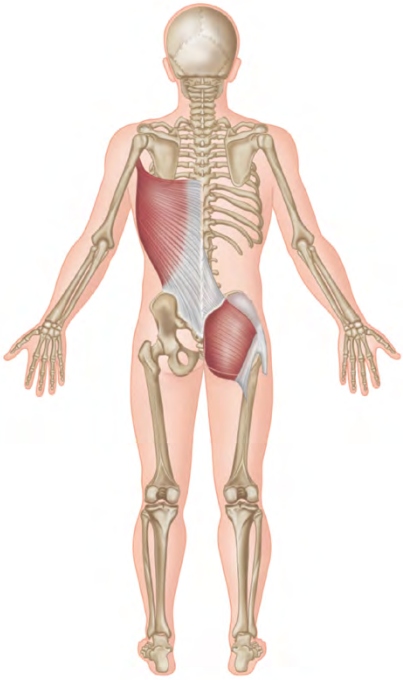
We hope that you will find this useful!

Stuart Hinds

Foreword

The hip and the shoulder share an intimate relationship, especially when we think of locomotion and 'four-legged' dynamics. Our shoulders are a modified forelimb which has been externally rotated (supinated) and our hind limbs (legs) internally rotated (pronated).

There are several fascinating and tantalizing insights connecting hip and shoulder mechanics.



Myers in his seminal work 'Anatomy trains' explores some of the myofascial connections for distribution of load and integrated movement both through the 'shoulder, and spiral lines'.

Movement and performance guru Paul Chek also has an interesting insight talking about both a posterior oblique sling mechanism which translates rotational forces from the Gluteus Maximus on one side to the Latissimus Dorsi on the other. And the Anterior oblique sling translating anterior forces from the Adductor complex and Psoas fibers to the opposite Internal Oblique; and even to the mediastinal fascia and shoulder, via the diaphragm.

Chek furthermore suggests that ambulatory walking of less than 0.75km per hour translates hip and shoulder forces to the same side, whilst a gait of >0.75km per hour tends to engage the opposite limb and sling mechanism.

The hip and shoulder as you can see are wired to work as a unit. This is just one of the reasons why I have taken such an interest in Stuart's work in this area, and have so much enjoyed co-operating with him to present this NAT Hip course.

Simeon Niel-Asher

Introduction

Having used the NAT shoulder protocol successfully for some time I was fascinated by its consistency and success.

Over my many years of working with elite athletes I had often felt frustrated when it came to my ability to treat hip pain and dysfunction in particular.

It was this frustration that led me to start thinking about the integration of some key NAT principles to the treatment of the hip.

I should note that I was first introduced to the NAT shoulder technique in 2007 and have been implementing the technique regularly, and with great success ever since.

Outstanding

Presented with a number of hip pain cases within Team Australia at the London Olympics 2012, and under pressure to deliver quickly, I began to put some of my thoughts regarding NAT hip to the test. The results were outstanding.

Since 2012 I have successfully treated literally hundreds of complex hip problems with the techniques and approach that we are presenting in this course.

Not only does NAT hip produce consistently good results, but the ideas behind it, and their implications for treating other body regions are extremely exciting.

Holding Patterns

For example, the possibility that hip syndromes might manifest as a generalized neurological holding pattern are very compelling.

The notion that this holding pattern might be driven by nociceptive pain (via trigger points) and altered reciprocal inhibition seems to make a lot of clinical sense.

As does the idea of deliberately using nociceptive pain to change the relationships between the periphery and the cortex.

Algorithm

As with NAT shoulder, the NAT Hip technique is based on a soft tissue algorithm that works to "unlock" of the hip 'holding pattern'. This antalgic response can be seen in a variety of Hip joint dysfunctions.

NAT hip aims to address 3 common types of hip dysfunction patterns. These are:

1) Hip extension - anterior
2) Hip abduction - lateral
3) Hip rotation or complex restrictions

The NAT Hip treatment protocol has been shown to be effective for unlocking all three of these patterns in one smooth soft-tissue algorithm.

CONTENTS:

Common types of hip pain for NAT Hip

1. Arthritis, Post-operative stiffness
2. Labral tears & Femoral Acetabular Impingement
3. Groin Strain
4. Osteiitis Pubis
5. Bursitis & Tendonitis
6. Snapping Hip Syndrome

The high performance hip

1. History of how the technique was developed
2. A Lightbulb moment

Common Types of Hip Pain

The Arthritic Hip

Osteoarthritis is the most common joint disorder in the Western World and is the leading cause of disability in the elderly, with nearly 200,000 total hip replacements performed annually in the USA alone. X-Ray evidence of osteoarthritis of the hip is present in about 5% of the population over the age of 65 years. However, not all patients with radiographic evidence of osteoarthritis have consistent symptoms. It is important to note that there often is an inconsistent relationship between radiographic changes and symptoms. It is not uncommon for patients to have severe OA changes on x-ray but very little hip pain (even with severe stiffness).

The main presenting feature of OA hip are pain and stiffness. As the OA advances, spinal pain and fixed flexion of the hip joint can be seen. The level of pain or stiffness patients' present with is mainly related to how advanced the arthritic changes are (as well as the sensitivity of the patient). In advanced cases the patient often presents with a tell- tale limp and loss of lumbar spine mobility with a positive Thomas Test.

Stages of Hip OA

Osteoarthritis begins with degenerative changes of the articular cartilage in a localized, nonuniform manner. This process is followed by a subsequent thickening of the subchondral bone, new bony outgrowths at joint margins (osteophytes), and mild-to-moderate synovial inflammation (synovitis).

OA hip is categorized as primary (idiopathic) or secondary (systemic or localized) disease. Risk factors for primary osteoarthritis of the hip include old age, high bone mass, a genetic predisposition for the disease, increased BMI, participation in weight-bearing sports (e.g., running at an

elite level), and occupations that require prolonged standing, lifting, or moving of heavy objects.

Secondary causes (systemic) include hemochromatosis, hyperparathyroidism, hypothyroidism, acromegaly, hyperlaxity syndromes, Paget's disease, gout, and chondrocalcinosis.

Localized risk factors include joint injury, developmental deformities (e.g., slipped capital femoral epiphysis), Legg–Calvé–Perthes disease, acetabular dysplasia, osteonecrosis, and rheumatoid or septic arthritis as a result of cartilage damage.

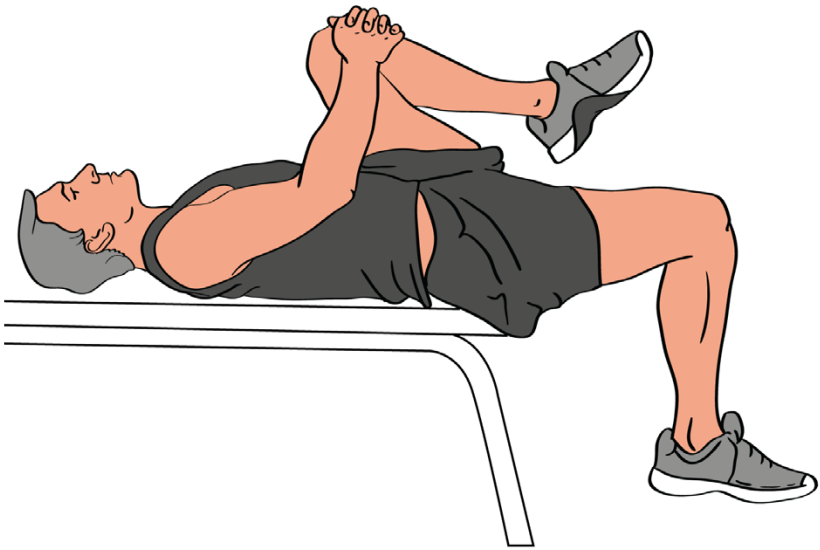
Thomas test

The **Thomas test** is used to rule out hip flexion contracture and psoas syndrome. Often associated with runners, dancers, and gymnasts who complain of hip "stiffness" and reported "snapping" feeling when flexing at the waist.

The patient lies supine on the examination table and holds the uninvolved knee to his or her chest, while allowing the involved extremity to lie flat. Holding the knee to the chest flattens out the lumbar lordosis and stabilizes the pelvis. If the iliopsoas muscle is shortened, or a contracture is present, the lower extremity on the involved side will be unable to fully extend at the hip. This constitutes a positive Thomas test. Sometimes with a very flexible patient the Thomas test will be normal despite a psoas dysfunction being present. However, in the patient with a normal hip joint, a positive test is a good indicator of psoas hypertonicity.

Other signs from the Thomas test:

- Opposite/ contralateral hip flexes without knee extension- tight iliopsoas
- Hip abducts during the test- tight tensor fasciae latae
- Knee extension occurs - tight rectus femoris
- Lateral rotation of tibia - tight biceps femoris



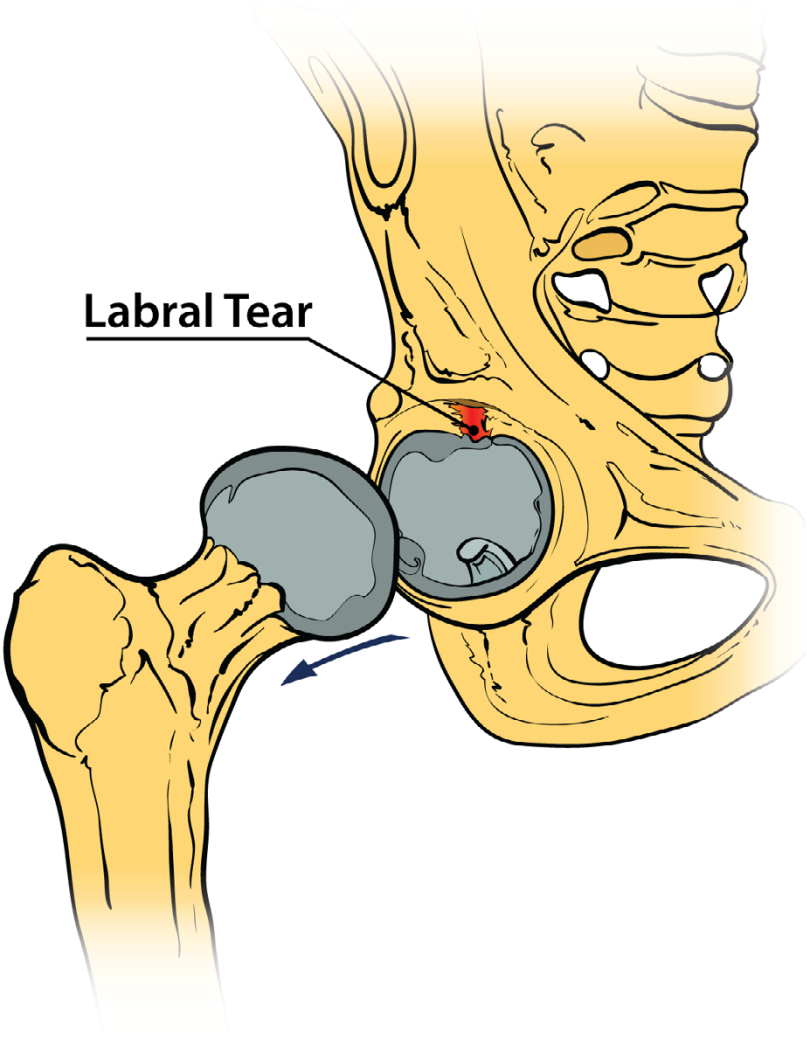
Labral Injury and Femoral Acetabular Impingement (FAI)

The Labrum

The acetabular labrum is a ring of fibrocartilaginous cartilage extending across the majority of the acetabulum, increasing its depth. The labrum acts as a type of suction seal around the femoral head, maintaining the synovial fluid within. This fluid both protects, cushions and nourishes the joint. The labrum is an integral component of hip stabilization. Hence when it is injured it can have a significant biomechanical impact.

Tears

Symptomatic labral tears are most common between the ages of 25 and 40 with equal prevalence in men and women. Labral tears typically result from an underlying problem. They are actually pretty common with a prominent cadaver study (McCarthy et al) demonstrating at least one labral tear in 53 or 54 specimens. Byers et al found the labrum was attached from the articular surface of the acetabulum in 88% of people over the age of 40.


Labral Tear

Causes

1) Bony

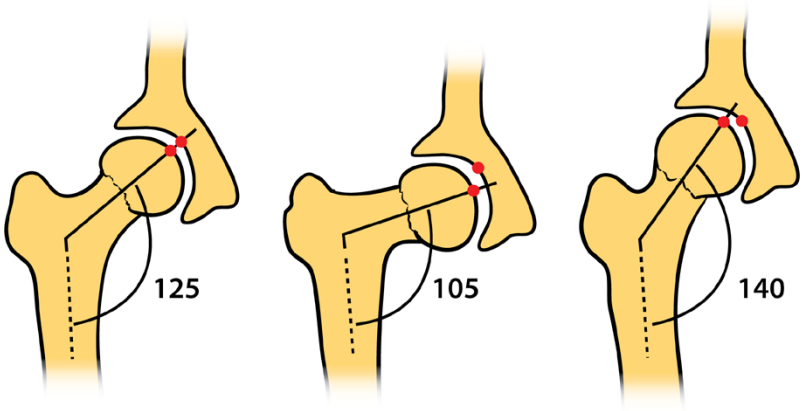
a. Static Overload from femoral antiversion, acetabular dysplasia (ant/lat)or valgus of femoral neck positioning

b. Dynamic impingement CAM impingment, Pincer Impingement, Femoral retroversion

2) Soft Tissue Laxity (hypermobility - Ehers Danloss Trait), Psoas impingement

3) Traumatic Dislocation, Subluxation

Angle of inclination



A Normal **B** Coxa vara **C** Coxa valga

History and Presentation of Labral Tears

Overuse activities are common in labral tears especially external rotation and hyperabduction. Patients often present with groin pain localized to the anterior hip/inguinal region. Pain can be intermittent and refer into the thigh. Sleep may be disturbed secondary to the pain. The pain is described as sharp and deep which is reproduced with high degrees of flexion and internal rotation. Prolonged sitting or activity can increase pain.

Symptoms of Labral Tear
• 92% of people complain of anterior groin pain
• 33% of people recall a traumatic onset
• 66% are suspected to be degenerative in nature
• 56-71% complain of night pain
• Up to 89% report limping
• 67% report clicking
• >50% describe locking or catching