

THE FOOT & GAIT CLINIC

YOUR COMPLETE GUIDE

BIOMECHANICS

FOR THE TREATMENT OF LOWER LIMB
MUSCULOSKELETAL PROBLEMS



What is

BIOMECHANICS?



Biomechanics is the science of the movement of your body, including how bones, tendons, muscles and ligaments work together to move. In podiatry we focus on the lower half of the body, starting at your lower back all the way down to the tips of your toes.

As we stand, walk or run our body will compensate for any anomalies caused by asymmetry. These compensations will put muscles, joints, ligaments and tendons under strain as they function in an abnormal way. Over time the joints and soft tissues become inflamed and injured.



Biomechanics and Prescription Orthotics Treat:

- Plantar Fasciopathies
- Achilles Tendonopathy
- Bunions
- Ankle and leg pain
- Knee, hip and lower back pain
- Tibialis Posterior Dysfunction
- Walking and running pathologies

Providing Clinical Excellence.

Depending on your concern we offer two different types of appointments, both available with our specialist MSK podiatrists.

MSK (Musculoskeletal) Consultation:

This is a 30 minute appointment during which a MSK podiatrist would be able to discuss your problem in more detail, take a look at your feet, with the help of ultrasound scanning if required, diagnose your condition and explain their recommendations going forward. The appointment is advise-based rather than treatment-based, however interim help reducing any severe pain rather than treating the cause of the problem can be discussed.

Biomechanical Assessment & Gait Analysis:

This is a full examination of the lower limbs, looking for underlying causes of the foot, ankle, knee, hip and back concern, which may be contributing to the way you are moving or the pain you may be experiencing.

It also includes a static and dynamic assessment, looking at your range of movement and strength. An analysis of your walking and/or running gait, which is paused and played back to fully observe your movement and posture.

If necessary the use of the ultrasound machine may be used at no extra cost. With all this, it will help determine the best treatment plan moving forwards.

TREATMENT *Plan*

Based on the diagnosis of the cause of your concern the podiatrist will put together a treatment plan especially for you.

MSK Treatment Plan

| | |
|---------------|--------------|
| Date of birth | Practitioner |
| | Appointment |
| | Created |
| | Last updated |

Presenting Problem

Presenting Problem: Findings

Treatment Plan

Treatment Options - In assessment

- Footwear
- Temporary Orthoses
- Rudimentary Exercises

Footwear: Continue with new styles purchased

Rudimentary exercises: Enabled via 'HiLab my Patient'

Treatment Options - Non Invasive.

- Focus Shockwave Therapy - x 4 sessions - £400 or £120 per session
- Class IV Laser Therapy - x 4 sessions - £800 or £120 per session
- Physiotherapy: 60 minute appointment - £60, 30 minute appointment - £40
- Massage Therapy: 60 minute appointment - £50, 30 minute appointment - £40
- Osteopathy: 60 minute appointment - £80, 30 minute appointment - £40
- Regular manipulation - £30

Treatment Options - Orthoses.

- Proforma - £80 (typically lasts 6 months)
- SemiRigid - £100 (typically last 12 months)
- Semi Rigid - £100 (typically last 2 years)
- Singlebar Carbon FPC/Dura shoe FPCs - £200 (includes casting and fittings). (Shall typically last a lifetime, top covers and bottom covers may need to be replaced every few years)

Your individual treatment plan will outline:



- Your presenting problem
- Footwear advise
- Rudimentary Exercises
- Non-Invasive options such as:
 - Focused Shockwave Therapy
 - Class IV Laser Therapy
 - Physiotherapy
 - Regular Manipulation
- Prescription Orthoses
- Injection Therapies
- Diagnostic Imaging

*Providing Clinical
Excellence*

What are your options?

Sometimes, as part of an initial assessment, if clinically appropriate, clinicians will make you a pair of trial prescription orthotics in order to assess the efficacy of orthotic-based treatment. Progression onto permanent orthotics is not always required.

These orthotics are removable and can be used in similar footwear, allowing you to change your footwear when necessary.



CUSTOM MADE SCANNED/ CASTED FOOT ORTHOSES

If the treatment plan calls for a custom made orthoses then an impression or scan of the foot is taken. This impression is taken with the foot held in a particular position and



requires a further appointment. Some custom made devices are made in our in-house lab while others are sent to an outside lab which takes 4 to 6 weeks to make.

ADAPTED SANDALS

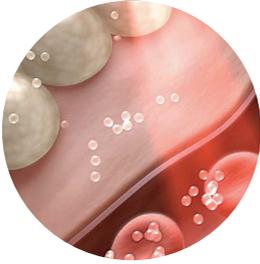
We have a lot of patients asking about what about summer footwear. There are options:

- We can make prescription sandals, however these may come with a high price tag and may not align with your personal style, or
- We can take the sandals you already have and if they are suitable we can slice them open and add the prescription inside the sandal. That way we can have the best of both worlds.



Orthotic prescription in your preferred sandals.

FOCUSED SHOCKWAVE *And* CLASS IV LASER *Therapy*



The K-Laser software is designed to adjust the power and wavelengths of the laser to transform it into a low-level laser therapy (LLLT) device for therapeutic use. It can also be operated at ultra-low power when appropriate.



The vasodilation effect of Laser light therapy also known as LLLT (Low Level Laser Therapy) helps with tissue oxygenation. It is a great additional tool to improve wound healing.

Chronic muscular and tendon pain
Acute muscular and tendon pain
Oedema and swelling
Increasing joint ROM
Reduction of pain
Metatarsalgia
Bursitis
Plantar Fasciopathy
Tarsal tunnel syndrome
Arthritis-Osteoarthritis
Interdigital neuritis
Heel Spur
Achilles tendonitis
Morton's neuroma
Oedema
Tibia-tarsal Distortion



Benefits Include:

- Anti-inflammatory
- Analgesic effect
- Accelerated tissue repair
- Reduction of scar tissue

Diagnostic IMAGING And INJECTION Therapies

Musculoskeletal Diagnostic Imaging

Ultrasound scanning



Ultrasound technology utilises sound waves to offer clinicians a visual representation of internal structures. Ultrasound scanning can be used in the diagnostics of sporting injuries, arthritis, or pain from an unknown cause.

This service is available during your MSK appointments with one of our three certified clinicians.

MRI scans & X-rays



MRI scans are helpful in the diagnosis of soft tissue injuries such as ligament, tendon, muscle, connective tissue and cartilage. There is also limited use assessing bone related conditions.

XRays use high-energy electromagnetic radiation. This produces images of bones and joints. However, XR isn't useful in the assessment of any soft tissue structures as these aren't visible on XR.

MRI and XR imaging requires onwards referral to our partner providers.



Ultrasound Guided Injection Therapies

Ostenil Injections

OSTENIL is used for treating osteoarthritis in joints. It is used to treat joints that are classed as synovial.

Steroid Injections

Steroid injections are used to treat several musculoskeletal conditions in both joints and soft tissue and are used to reduce inflammation and pain. They are also used to give short term pain relief whilst rehab is being undertaken.

THE FOOT AND GAIT CLINIC

Providing Clinical Excellence

Let's get in touch

31 Bridge Street, Taunton, TA1 1TQ

01823 256440

www.footandgaitclinic.co.uk

reception@footandgait.co.uk