# MECHANISMS OF INTERFERENTIAL

### WHAT IS IT?

It is a form of therapy that utilises two different frequency electrical currents (high and low frequency) that **interfere** with one another to create a medium frequency within the desired tissue(s).

#### WHY?

This therapy helps to aid with the reduction of a pain and swelling but also stimulate muscles.

## **HOW DOES IT WORK?**

it utilises two different frequency electrical currents (high and low frequency) that **interfere** with one another to create a medium frequency within the desired tissue(s). The electrodes will be placed in a way to enable this to occur.

### WHAT IS IT FOR?

It can be used for: Acute and Chronic Pain Swelling Musculoskeletal pain (e.g. Tennis Elbow, OA, Tendinitis)

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# SWAN SERVICES

Students involved with the development Ike Ndugbu (Keele) & Joshua Dang (Winchester), PEA1 & P1 June 2024

# RISKS OF INTERFERENTIAL



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#### MUSCLE IRRITATION

If the electrode pads are too close to each other this can potentially cause muscle soreness or fatigue through over-activation of the muscle fibres.

**SUBTLE DISCOMFORT** The lower frequency Interferential needs to

get deeper. Thus it may create a discomfort like feeling in the superficial tissues (e.g skin)

**Communicate with your therapist if this is the case** 

#### ELECTRIC SHOCK

Should the electrodes not have a good connection to the skin. The electrical current can jump from the electrode to the body causing a shock sensation to be felt.

#### **SKIN IRRITATION**

If allergic to gel based electrodes this can cause irritation to the skin. **Discuss this with** your therapist prior to treatment if you have sensitive skin, We use Hypoallergenic electrodes but there is always a risk of irritation.

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# BENEFITS OF INTERFERENTIAL





#### **PAIN RELIEF**

Helps to stimulate the body's own natural pain response system. Reducing pain signals sent to the brain.

### **BLOOD CIRCULATION**

Blood vessels expand to allow more blood flow through the region affected by the stimulation

#### **REDUCE SWELLING**

Increases in blood flow and stimulation of muscles help to flush through any swelling.

#### IMPROVE RANGE OF MOVEMENT

Reductions in swelling and stimulation of muscles that are 'weak' can then potentially aid range of movement changes.

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