

# **PHYSIOTHERAPY TECHNIQUES**

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**FSC PT I**

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# TENS(TRANCUTANEOUS ELECTRICAL NERVE STIMULATION)

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- **TENS:** A device that uses electric current to stimulate nerves for therapeutic purposes.
- **How it works:** Sends electrical pulses through the skin to control pain signals in the body.

# uses

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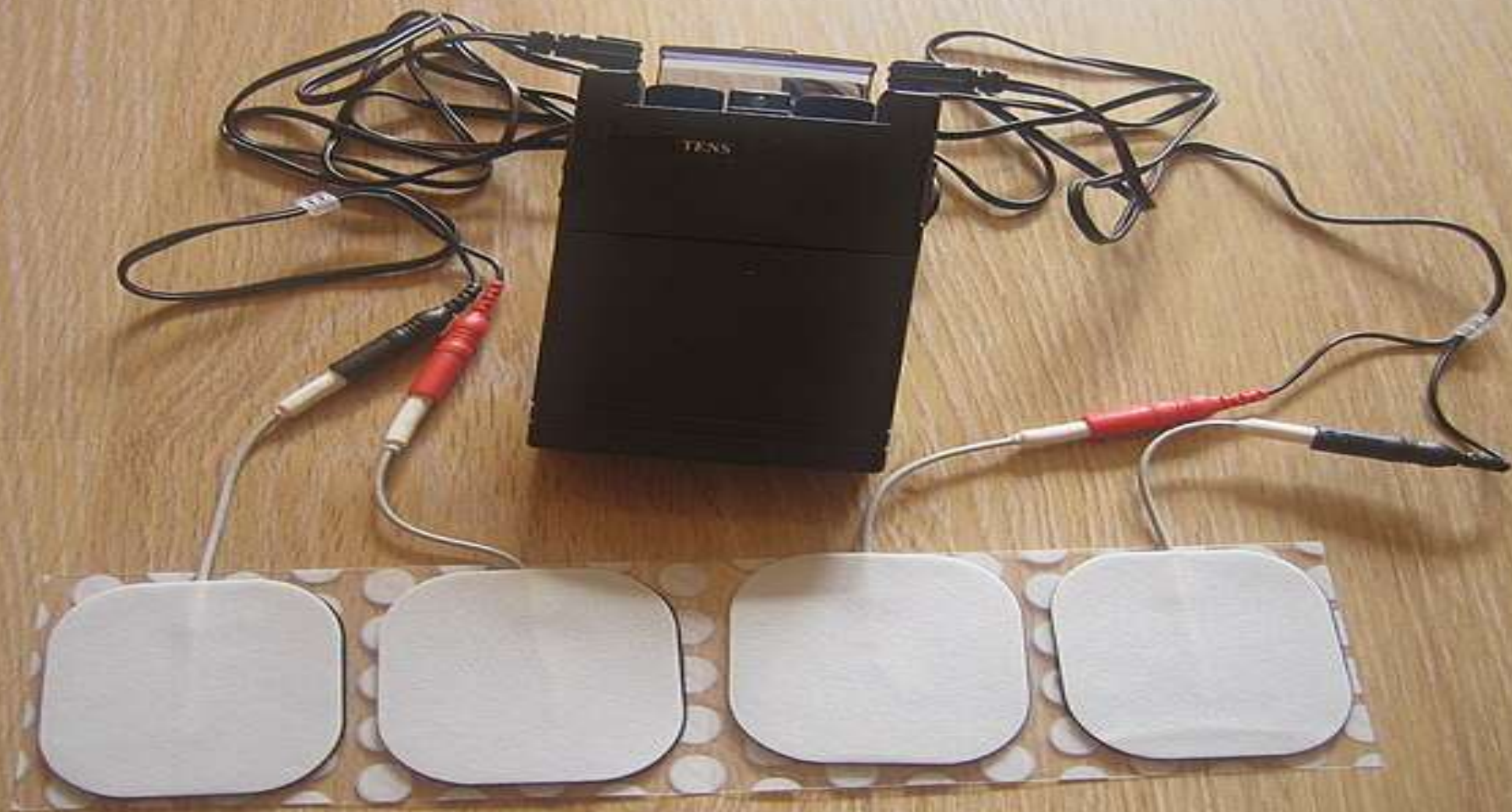
- Relieve pain
- Control abnormally excited nerves and release endorphins
- Used for conditions like bursitis, arthritis, tendinitis, surgery, injuries, and wounds



# Application & effectiveness

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- Can be used at home or in a hospital/healthcare facility
- Electrodes applied to skin using currents targeted to body parts
- Proven effective in clinical studies with low frequency ( $<10$  Hz) or high frequency ( $>50$  Hz)





# Ice packs

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- Preferred over commercial ice packs to avoid chemical spills
- Use a paper or thin cloth between ice and skin-
- **Effects:** pain relief, prevention of swelling and bruising, decreased blood flow
- Can use crushed ice with water and alcohol mix for better application

# Hot packs

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- - Used for moist heat applications to relieve pain
- Temperature range: 140-160°Fahrenheit
- Holds heat for ~30 minutes
- Softens fascia, dilates superficial blood vessels for massage prep
- Use a towel between pack and skin to prevent burns

# Paraffin bath

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- **Purpose of Paraffin Baths:** Used to apply heat energy to angular bony arches and wrists, hands, feet, ankles, knees, and elbows.
- **Benefits:** Relief and softening of the skin when joints are hot and swollen. Most useful for arthritic joints.
- **Temperature range:** 122°F to 130°F.



# Application

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- Client dips affected part in molten wax (5-12 times).
- Wax hardens into a glove.
- Remove wax covering and use for finger exercise or replace for next client.

# Precautions

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- Avoid movement to prevent cracks.
- Inform client to keep area at rest for 15-30 minutes after dipping.
- Wrap area in plastic sheet or towel.
- Not for clients with open lesions or peripheral vascular disease.

# Laser therapy

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- **Use in Physiotherapy:** Accelerates tissue healing and offers pain relief.





# Indications

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- - Accelerates superficial wound and deep tissue healing.
- - Reduces pain associated with musculoskeletal conditions (trigger points, hypersensitive areas).
- - Reduces inflammation (rheumatoid arthritis, carpal tunnel).
- - Decreases scar tissue, swelling, and stiffness in patients.

# How laser therapy works?

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- - Increases collagen production for stronger tissues.
- - Increases energy production within the body.
- - Reduces edema by decreasing swelling.
- - Increases production of natural pain killers (endorphins).
- - Reduces pain by decreasing nerve firing rate.



# contraindication

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- - **Not recommended for treatment over:**
- - Areas of active cancer.
- - Uterus of pregnant women.
- - **Safety Note:** Laser light can cause retinal burns if viewed directly.



**ANY QUESTIONS ABOUT  
YOUR WORK?**



**... Ask your  
Supervisor**



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Thank  
You