TENS THERAPY

(TRANSCUTANEOUS ELECTRICAL NERVE STIMULATION)

WHAT IS TRANSCUTANEOUS ELECTRICAL NERVE STIMULATION?
TENS therapy is an alternative therapy used to treat children with Overactive Bladders (OAB).

Symptoms of overactive bladder include:
- Urinary frequency
- Urgency
- Daytime incontinence
- Bedwetting.

Your child may be considered for TENS therapy if their bladder symptoms have not improved after receiving bladder retraining education or after taking medications to treat their urinary continence symptoms.

It is a drug free and safe treatment option, with minimal to no side effects.

TENS THERAPY AND HOW DOES IT WORK?
Superficial electrode pads are placed on your child’s skin at the sacral region (bottom), these are attached to a hand controlled TENS device. This device is small and lightweight, and may be carried in your child’s pocket or waist belt. When activated, the TENS unit operates by sending low electrical pulses through the skin to stimulate the sacral nerves. Interrupting or blocking the overstimulation signals to the bladder. This is effective in improving symptoms as it desensitises the urgency to wee, allowing the bladder to increase in size which in turn reduces urinary urgency, frequency and incontinence.

Findings gathered from research on the use of TENS therapy to treat OAB in children has shown an improvement in 47-76% of users. However, unfortunately this treatment option may not be beneficial to every child with OAB symptoms.

WHAT HAPPENS DURING MY SESSIONS?
A programme will be devised and tailored to your child’s individual needs. At the first session, you and your child will become familiar with the TENS device, how to operate it, apply it and understand its function. Our aim, is that you will have supervised sessions initially, followed by a home maintenance programme with on-going Urology Nurse Specialist support.

The TENS unit will be loaned to you for home use for the duration of the treatment plan. On completion of this time frame and following a successful outcome in results of urinary symptoms, the TENS manufacturer / retailer details will be provided for personal purchases.
PLEASE NOTE:

The TENS device which is on loan to you, may be used only by the assigned child it has been prescribed to. You will be required to sign a form agreeing to the return of the TENS device when requested, this will have an identification number for our records.

Please be advised that suitability for TENS therapy is assessed on initial consultation prior to administration.

TENS should be avoided, if you have the following conditions:
- Epilepsy
- Poor sensation in the area where the electrodes are to be applied
- Persons with a pacemaker or implantable cardioverter defibrillator

PRECAUTIONS / SKIN CARE AT ELECTRODE SITES
- Please ensure the skin areas to which the electrode pads are to be applied are clean, dry and free from cuts, grazes and areas of skin irritation.
- Please observe for skin irritation at the site of electrode pads, if you are concerned stop treatment and seek advice from your Urology Nurse Specialist.
- It may be helpful to rub skin lotion on electrode placement area when not wearing electrodes.
- Do not immerse unit into water or any other substance
- Please ensure to observe your child during treatment, electrodes should only be placed to the sacral area as prescribed.
- Please ensure to follow the recommended treatment, times, duration and programme settings prescribed as over stimulation may result to burns to the skin.

![TENS electrode placement area](https://physioneeds.biz/tens-machine-tpn-200.html)

Please refer to Manufacturers handbook “TENS THERAPY: A Practical Guide, for additional information / advice. This is provided in your TENS carry case

YOUR CHILD’S PACK SHOULD CONTAIN:
- TENS machine, TPN 200 plus
- 1 soft carry case
- 1 x9v battery
- 1 pack self-adhesive electrodes
- 2 lead wires
- Instruction manual
PROGRAMMING YOUR CHILD’S TENS MACHINE

The standard settings you should use for your child are as follows:

MODE= Continuous (C)  
PULSE WIDTH (Duration)= 300us  
PULSE RATE (Frequency)= 10 Hz  
DURATION= 30 mins, 2 times per week (e.g.: M/T)  
Button to adjust the stimulation level from 2 to 4, max 6.

SETTING UP AND ATTACHING THE MACHINE

- Always check that the machine is switched off before starting
- Put the battery in the TENS machine by pulling back the sliding lid – the battery may already be inserted
- Make sure that the area of skin where the electrode pads will be placed is clean and dry.
- Plug the leads into the electrode pads and attach the leads to the machine
- Remove the plastic covers from the electrode pads.
- Apply the electrode pads to the areas as you have been shown – the electrodes must not be touching, and should be at least on pads width apart.
- Switch on the TENS machine and gently turn up the dial until the sensation through the electrode pads is strong but comfortable. Your child should feel a gentle tingle or buzzing sensation.
- If the sensation is not in the right place, switch off the machine before re-positioning the electrode pads.
- Turn off the machine. Switch off the machine by turning the dial on the top of the machine to the OFF position.
- Unplug the leads and store them with the electrode pads in the bag provided.
- Remove the electrode pads from the skin and place them back on the plastic sheet.
- Store the TENS machine in the holder provided.
- If needed, wash the area where the electrode pads were placed with soap and water.
- You will be asked to position the electrode pads as demonstrated in the diagram, please do not position them anywhere else unless advised to do so by your Doctor or Urology clinical Nurse Specialist.

Please note: you child should be the only person turning the dial to increase the signals

Quick Reference Guide

When you are very familiar with the operation of the TENS device(s), use the following steps as a quick reference to operate the device. For more information, refer to the Operation section in this guide.

Step 1:  
- The device is switched off
- Insert the battery, taking care to match up the symbol (+)

Step 2:  
Connecting the cable to the electrodes and the device

Step 3:  
- Apply the electrode pads on the skin as recommended by your physician / consultant

Step 4:  
- Ensure the pads are clean

Step 5:  
- Operate program / Timer / Pulse width / Pulse rate
- Adjusting desired Intensity level

Warnings:
- Do not use this system if you have a cardiac pacemaker, implanted defibrillator or any other implanted medical device
- If pregnant, consult with physician prior to use
- Do not use this system if you have undiagnosed Chronic pain
For more information on TENS Therapy please contact Urology Clinical Nurse Specialist at Children’s Health at Crumlin, Dublin.

**CONTACT DETAILS**

TEAM: ..........................................................  Contact No:..................................................

Urology Department 01 409 6100 - Bleep 8686 / 8687 *(Mon-Fri 9am-5pm)*

Out of hours - Contact your local Emergency Department

**REMEMBER:**

Ask your nurse if you are unsure about anything about your child's care.

**Additional Instructions**

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