STIM



MADE MOVE

What is stim?

Electrical Stimulation is the application of electrical current to the body for therapeutic benefit.

What is TENS?

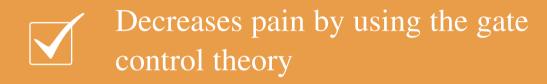
TENS stands for Trans-cutaneous Electrical Nerve Stimulation.

Who can buy a TENS unit?

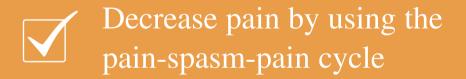
Anyone can buy a TENS unit. Patients often purchase these for home use as well.



How does TENS help?









How do you achieve pain reduction?

		Gate Control	Endorphin Release	Pain Spasm
F	requency	100-150 Hz	2-10 Hz	30-80 Hz
	Intensity	To produce tingling	To produce contraction	To produce contraction
	Duration	as needed	20-30 min	10-40 min



When to avoid TENS...









Patients with untreated bleeding disorder

Areas with actively deep vein thrombosis

Areas of impaired sensation

Eyes, reproductive organs, neck/head of epileptic patients, or anterior neck



Gate Control Theory

The TENS unit initiates and Action Potential (electrical signal) in a peripheral nerves thereby causing the brain to focus on this stimulation rather than the painful input caused by your injury.

Endorphin Release Mechanism

The TENS unit repetitively stimulates motor and nociceptive A-delta (nerves that signal damage) causing contractions and brief moments of sharp pain. This triggers our internal opioid releasing system (painkillers our body makes!)



Pain-Spasm-Pain Cycle

The TENS unit causes sustained contracted followed by periods of relaxation thereby reducing the overall tone of muscular tissue. Fatiguing the muscle reduces spamming which reduces the patient's pain.

