

Should I have transcutaneous electrostimulation (TENS) for osteoarthritis (OA) in my knee?

A Cochrane decision aid to discuss options with your doctor

This decision aid is for you if:

- You are 16 or older.
- Your doctor has told you that you have osteoarthritis (OA) in your knee.

What is osteoarthritis (OA)?

Osteoarthritis is a disease of the joints, such as your knee or hip. When the joint loses cartilage, the bone grows to try and repair the damage. Instead of making things better, however, the bone grows abnormally and makes things worse. For example, the bone can become misshapen and make the joint painful and unstable. This can affect your ability to go about your daily activities.

What is transcutaneous electrostimulation (TENS)?

Transcutaneous electrostimulation, such as TENS, is a kind of pain relief typically using electrical currents applied to the skin. Transcutaneous electrostimulation machines are typically small, battery-operated machines with 2 electrodes attached. Electrodes are wires that send the electrical current. Usually, you connect two electrodes from the machine to your skin on the painful area. Your doctor or physiotherapist will show you how to use it, and most machines can be used at home.

What are your options?

- TENS
- Discuss other OA options with my doctor.

What other health factors may affect your choice?

Check any that apply and discuss your concerns with your doctor.

- I have epilepsy
- I have a cardiac pacemaker or defibrillator
- I have moderate to severe heart disease
- I have broken, infected or damaged skin or a cancerous lesion
- I have a diminished sensation to heat, and touch
- Other factors: _____

Working through the 4 steps of this decision aid may help you decide.

Step 1: What are the benefits and side effects of each option?

What does the research show?

Benefits ++

3 more people who used TENS had improvement in their physical function 4 weeks after using it. (NNT: 10)

We are **uncertain** whether TENS will help your pain because of the very low quality of the evidence.

TENS

71 Do not improve

29 Improve



Fake TENS or no treatment

74 Do not improve

26 Improve



Side Effects ++

Therapeutic ultrasound may not have any side effects: **no side effects were reported**, but we do not have precise information about side effects and complications. This is particularly true for rare but serious side effects.

Note: The options include 'estimates' of what happens to groups of people based on the available research.

The quality of these estimates is summarized using the GRADE system as follows:

- ++++ **High** quality – further research is **very unlikely to change** the estimate.
- +++ **Moderate** quality – further research **may change** the estimate.
- ++ **Low** quality – further research is **likely to change** the estimate.
- + **Very low** quality – further research is **very likely to change** the estimate.

**NNT stands for Number Needed to Treat. It is a way of showing how many people must take a drug for one person to benefit.*

Step 2: Which reasons to choose each option matter most to you?

Common reasons to choose each option are listed below. Check ✓ how much each reason matters to you on a scale from 0 to 5. '0' means it is **not** important to you. '5' means it is **very** important to you.

How important is it to you...

	TENS			No TENS		
	←			→		
	Not important			Very important		
	①	②	③	④	⑤	
...to be certain about the benefits and harms of TENS?	①	②	③	④	⑤	
... to avoid to the cost of TENS (if it is not covered by your insurance)?	①	②	③	④	⑤	
...to avoid to inconvenience of going to TENS sessions or learning to use TENS at home?	①	②	③	④	⑤	
List other reasons that are important:						
_____	①	②	③	④	⑤	
_____	①	②	③	④	⑤	
_____	①	②	③	④	⑤	

Now, think about which option has the reasons that are most important to you.

Which option do you prefer? Check one.

- TENS
- I will discuss the other options with my doctor

Step 3: What else do you need to prepare for decision making?



Knowledge

Find out how well this decision aid helped you learn the key facts.

Check the best answer.

- | | | |
|--|----------------------------------|-----------------------------------|
| 1. Researchers are uncertain whether TENS will improve your pain. | <input type="checkbox"/>
True | <input type="checkbox"/>
False |
| 2. TENS treatment is available in a clinic or at home. | <input type="checkbox"/>
True | <input type="checkbox"/>
False |
| 3. Researchers are not sure whether TENS has any side effects or complications because these were not reported in studies of TENS. | <input type="checkbox"/>
True | <input type="checkbox"/>
False |

Check your answers at the bottom of the page.

Yes No

Do you know enough about the benefits and side effects of having TENS?



Values

Are you clear about which benefits and side effects matter most to you?



Support

Do you have enough support and advice from others to make a choice?



Uncertainty

Do you feel sure about the best choice for you?

Step 4: What are the next steps?

- I will have TENS
- I will not have TENS at this time, and I will discuss other options with my doctor

This information is not intended to replace the advice of a health care provider.

Answers for key facts: 1. True 2. True 3. True

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