

Transcutaneous Electric Nerve Stimulation for Analgesia During Outpatient Endometrial Biopsy: A Randomized Controlled Trial

Pro # Pro00111100 · **NCT #** NCT05472740



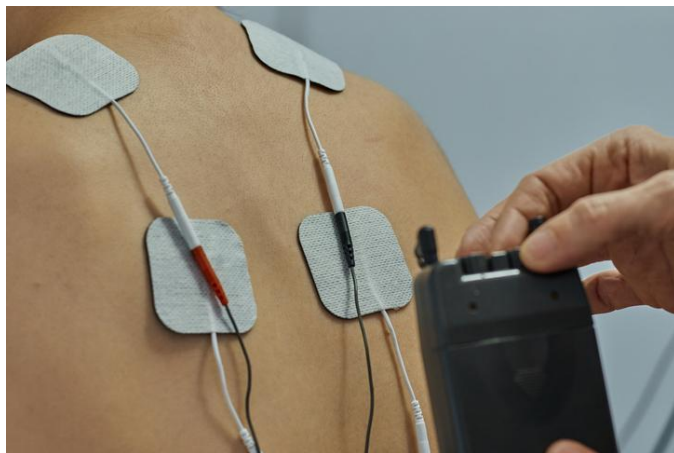
Why We Did This Study

Doctors often perform outpatient endometrial biopsies to investigate problems such as abnormal bleeding, but many patients experience moderate to severe pain during the procedure. There is no agreed-upon best way to manage this pain. This study tested whether a non-drug treatment called transcutaneous electrical nerve stimulation (TENS), which uses mild electrical stimulation through the skin, could reduce pain during an outpatient endometrial biopsy.

Who Participated in This Study?

The study enrolled adults aged 18 years or older who were scheduled for an outpatient endometrial biopsy at gynecology clinics at one academic medical center. Participants could speak either English or Spanish. A total of 135 participants were included in the final analysis. Of these, 68 received active

TENS and 67 received placebo TENS. The average age was about 51 years. Participants were undergoing an endometrial biopsy as part of their clinical care.



What Were the Results?



Participants using active TENS reported lower pain immediately after the biopsy than those using placebo TENS. However, the improvement did not meet the study's predefined threshold for a clinically meaningful benefit. Pain scores at other measured time points were similar between groups. Participants

using active TENS reported greater satisfaction with pain control, and most said they would use TENS again. Side effects were uncommon, with only one report of itching where a pad was placed.



What Do These Results Mean?

The findings suggest that active TENS reduced pain compared with placebo, but the reduction was not large enough to meet the study's definition of a meaningful clinical improvement. The results do not support routine use of TENS for pain control during outpatient endometrial biopsy. However, patient satisfaction was high, side effects were minimal, and some exploratory findings suggested that TENS may still be worth studying as an additional option for selected patients.
