



## Transcutaneous Electric Nerve Stimulation

Revised: July 19, 2021.

### Drug Levels and Effects

#### Summary of Use during Lactation

Transcutaneous electric nerve stimulation (TENS) is a method of using electrical stimulation of nerves using electrodes affixed to the skin. It is most often used to treat pain. Two small, low-quality studies found it useful for alleviating uterine pain caused by breastfeeding in the early postpartum period in hospitalized women. There are also anecdotal reports of TENS being used for nipple stimulation to induce lactation in adoptive mothers.[1] However, no scientific evaluation of the safety or efficacy of this use could be located.

#### Effects in Breastfed Infants

Relevant published information was not found as of the revision date.

#### Effects on Lactation and Breastmilk

A small, single-blinded study in Sweden compared high-intensity to low-intensity TENS for the alleviation of post-partum uterine pain during breastfeeding in the 24 hours following birth. The high-intensity TENS was more effective.[2]

A small unblinded study in Brazil compared uterine pain in hospitalized women who were experiencing uterine pain during breastfeeding in the immediate postpartum period. One group received TENS and the other did not. None of the patients used any other form of analgesia. Pain experienced at two different occasions during breastfeeding were compared. The decrease in pain from the first to second occasion was greater in the group receiving TENS.[3]

#### References

1. Smith KL. How do I use a TENS unit to stimulate lactation? Breast Notescom: Accessed July 15, 2021. Available at: <http://breastnotes.com/breastfeeding/BrFd-ReLac-TENS.htm>
2. Olsén MF, Elden H, Janson ED, et al. A comparison of high- versus low-intensity, high-frequency transcutaneous electric nerve stimulation for painful postpartum uterine contractions. *Acta Obstet Gynecol Scand.* 2007;86:310–4. PubMed PMID: 17364305.

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- de Sousa L, Gomes-Sponholz FA, Nakano AM. Transcutaneous electrical nerve stimulation for the relief of post-partum uterine contraction pain during breast-feeding: A randomized clinical trial. *J Obstet Gynaecol Res.* 2014;40:1317–23. PubMed PMID: 24750301.

## **Substance Identification**

### **Substance Name**

Transcutaneous Electric Nerve Stimulation

### **Drug Class**

Breast Feeding

Lactation

Electric Stimulation Therapy