

## **Transcutaneous Electrical Nerve Stimulation and Labor Pain**

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**Objective:** To investigate the efficacy and safety of Transcutaneous Electrical Nerve Stimulation (TENS) on uterine activity, duration of labor, intrapartum fetal heart rate and APGAR score, in relieving the pain of parturition .

**Design :** A controlled study to investigate the role of TENS to relieve the pain of parturition at Department of Obstetrics, Kastruba Medical College Hospital, Manipal, India.

**Material and Method:** Seventy gravid women with cephalic presentation in active labor, with no obstetric or medical complications were studied. Fifty women in GROUP I (Study group) (25 primi and 25 multigravidae) received TENS stimulation and Twenty women (10 primigravida and 10 multigravida) in GROUP II (Control group) received SHAM TENS (placebo).

**Results:** Fifty two percent (primi) and 64% (multi) gravida in Group I and 8% in the Group II experienced good to excellent relief of back pain. Eight percent in primi and 12% in multigravida had no relief in Group I. Few had benefit in the second stage. The duration of labor was reduced by 120 minutes in multi and by 77 minutes in primigravida in group I (P value <0.001). There was no change in the intrapartum fetal heart rate in both the groups and none required immediate resuscitation.

**Conclusion:** TENS seems an effective, simple to administer method of pain relief with no side effects on the mother or the child. It is effective in relieving the low back pain in 50%, but has no effect on the lower abdominal pain with the present stimulation technique.

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