Background: Perineal trauma following vaginal birth is associated with significant short term and long-term morbidity. Our aim in this study was to investigate whether perineal massage during second stage of labour as a perineal protection technique could decrease perineal trauma in form of episiotomy and perineal tears.

Objectives: To compare the incidence of episiotomy in labouring women undergoing perineal massage with the control group (no perineal massage). To compare the incidence and type of perineal tears in both groups.

Materials and methods: A randomized controlled study was conducted on 150 term primigravida admitted in Mahatma Gandhi Medical College and Research Institute, Puducherry to evaluate the efficacy of perineal massage in reducing incidence of episiotomy and perineal tears in the second stage of labour. 150 term antenatal women in labour were randomly assigned to two groups, one group of 75 received perineal massage and another group of 75 received routine care during second stage of labour. The frequency of episiotomy, perineal tear, intact perineum, degree of perineal tear, duration of second stage of labour and perineal pain after 24 hours was compared between the two groups.

Results: Baseline demographic characteristics were similar in both groups. In this study the incidence of episiotomy in massage group was 80% and in control group it was 93% (Relative Risk-0.857, P value-0.016). The incidence of perineal tear in massage group was 16% and in control group it was 9.4% (p-0.220). Among the massage group, 6.7% had first-degree perineal tear, 9.3% had second-degree perineal tear and no participant had third or fourth degree perineal tear. Among the control group 1.3% had first-degree perineal tear, 4% had second-degree perineal tear, 4% had third degree perineal tear and no participant had fourth degree perineal tear. There was no significant difference between the frequency of perineal tears among the groups. In massage group 4% had intact perineum after delivery, whereas none had intact perineum in control group. The mean duration of second stage of labour in massage group was 41 minutes in control group it was 51 minutes, which was significantly shortened by 10 minutes. The mean pain score was assessed 24 hours after delivery was significantly reduced in massage group. Birth outcomes with respect to Apgar score, NICU admission was similar in both groups.

Conclusion: Perineal massage was found efficient in reducing the incidence of episiotomy, duration of second stage of labour and perineal pain assessed 24 hours after delivery. While frequency of perineal tear, intact perineum did not differ significantly between groups. Perineal massage was protective against the severe forms of third and fourth degree perineal tear.