**Thesis Title** The Efficacy of Sunflower Oil in the Prevention of

Striae Gravidarum

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## **ABSTRACT**

Background: Striae gravidarum occur in 50% to 90% of women. The exact cause is still unclear. No definitive method has been shown to be effective in preventing the development of striae gravidarum. They can be a source of anxiety and lack of self-confidence resulting in a compromised quality of life.

Objective: To study the efficacy of sunflower oil in the prevention of striae gravidarum

Methods: Thirty-two nulliparous women between the ages of 18 and 40 years with gestational ages between 16 and 18 weeks were selected for the study and randomly placed into two groups. Each participant was instructed to apply the sunflower oil and the placebo randomly on each side of the abdomen twice daily until the time of delivery. The width of striae, photographs, pruritus score and side effects were evaluated every two weeks until delivery. Participant satisfaction was evaluated at week 10 and at delivery.

Results: Overall, the incidence of striae gravidarum was 55.4%. The incidence of striae gravidarum was 53.6% in the sunflower oil group and 57.1% in the placebo group. No statistical significance in the prevention of striae gravidarum was evident (p = 0.711). The mean gestational age at which striae gravidarum first appeared was

 $31.46 \pm 5.02$  weeks. The incidence of no significant striae in the sunflower oil group was 25.0%, while in the placebo group was 12.5%. The incidence of mild striae in sunflower oil group and placebo group was 25.0% and 31.3% respectively. The incidence of moderate striae in both groups was equal being 31.3%. The incidence of severe striae in sunflower oil group and placebo group was 18.8% and 25.0% respectively. The mean width of striae at delivery in sunflower oil group and placebo group was  $2.90 \pm 1.40$  mm and  $3.44 \pm 1.15$  mm respectively. There was no statistically significant difference in the mean width at delivery between both groups (p = 0.137). For the global photographic score, participant satisfaction and mean pruritus score, the results demonstrated no statistically significant difference between sunflower oil group and placebo group. There were few side effects.

Conclusion: In terms of incidence and severity, the results demonstrated no benefits of the use of sunflower oil. There was no significance in the prevention of striae gravidarum.

Keywords: Striae gravidarum/Sunflower oil/Prevention