

# Endometrial thickness its association in anovulation and Obesity in reproductive age

**N Hephzibah kirubamani**

Saveetha Medical College, India

## Biography

I have a passion for teaching. I am a member Medical education unit and designed Low fidelity simulators for teaching Episiotomy skill, IUCD insertion, Puerperal sterilization. Now it is routinely used for teaching Medical students. I also have keen interest in research, currently doing animal experiment with local plant extract. This has a special effect on bone resorption. I am inducing osteoporosis in mice and feeding them with this extract. The response is assessed by biochemical analysis and histopathology. I have seven PhD scholars doing research in various aspects of obstetrics & gynecology.

## Abstract

**Introduction:** Endometrial response depends on variation in oestrogen levels for proliferation and obesity plays an important role in endometrial proliferation

**Objective:** To evaluate relationship with endometrial thickness in anovulation and BMI

**Materials and Methods:** A prospective cross sectional study conducted at Saveetha Medical college Obstetrics and Gynaecologic department. After ethical clearance and informed consent 78 women between 20- 40 years were recruited with more than 45 days cycle. Premature ovarian insufficiency and uterine abnormalities were excluded. Number of cycles per year noted and total serum testosterone, androstenedione and estradiol levels were measured. The endometrial echo values obtained by transvaginal ultrasonography with the body mass index of women to verify if there is higher prevalence of endometrial thickening in women with high body mass index All the subjects were classified into two groups: Group A, endometrial thickness < 7 mm, Group B endometrial thickness  $\geq$  7mm Women were classified as obese based on their BMI and waist Hip ratio

**Results:** Average age in the study 28.9  $\pm$  3.9, average anovulatory interval was 147  $\pm$  12 days waist Hip ratio 0.82 $\pm$  0.06 SD and average endometrial thickness was 8.5 $\pm$  3.8 mm BMI 53.5% of women presented an index > 25 , BMI 26-29.9 in 25.73% and BMI >30 in 17.6% BMI > 30 all women and 26-29 BMI 18% had endometrial thickness more than 7mm. There was a statistically significant correlation between overweight and obese patients and increased endometrial thickness ( $p=0.05$ ). Among group A and group B there is no significant correlation either with number of cycles in a year, age, with serum testosterone or estradiol level.

**Conclusion:** This study shows that there is an influence of obesity on endometrial thickness. There is a positive correlation between Endometrial thickness and BMI.



**Citation:** N Hephzibah kirubamani, *Endometrial thickness its association in anovulation and Obesity in reproductive age*, RWPS 2020, Rheumatology-Immunology, Women's Health and Pharma Science, September 21, 2020, Webinar