

Does BMI really altere the hormonal profil in infertile women? Retrospective study in the region of sidi bel abbes (West Algeria)

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Abstract

Background: the Reproductive function is controlled by the hypothalamic–pituitary– gonadal axis, which is regulated by numerous endogenous and environmental factors such us adipose accumulation in obesity contributing to reproductive failure such as menstrual disorders and infertility, gestational failure and obstetric complications, and infertility.

Aim: The aim of this study was to elucidate the possible correlation between body mass index as fatness indicator and hormonal profile in infertile women from the west of Algeria.

Subjects and methods: To identify the impact of overweight and obesity on female hormonal profile ; we conducted a prospective study measuring pituitary hormones (FSH and LH and prolactin) , steroid sex hormones (progesterone , testosterone and estradiol) , anti miulleian hormone , and thyroidal hormones (FT3 , FT4 and TSH) in 360 women consulting for subfertility in private genecologycal and obstetrical centers in SID BEL ABESS (West of Algeria)

Result: Our study showed that The majority of patients were aged between 20 and 29 years, representing a percentage of 47.8%, with the average age in sample (31.65 ± 6.93 ans). the majority of subjects was obese 46.4%, or overweight (39.4%) with an average BMI of (29.76 ± 4.85 Kg / m2).

No statistically significant association was found between the BMI as obesity indicator with hormonal levels of pituitary hormones (FSH and LH and prolactin), steroid sex hormones (progesterone, testosterone and estradiol) , anti miulleian hormone , and thyroidal hormones (FT3 , FT4 and TSH).

Conclusion: the results of our study showed that the majority of women included in our study had a high BMI but no statistical significant difference was found between underweight , normal , overweight and obese women , that's why more studies should be conducted to elucidate the in which level does obesity impair the reproductive outcomes .

Keywords: Female infertility, hormonal profile, BMI, obesity, overweight.



Biography:

Hadjer Bekhadda is from Djillali Liabes University, Algeria

Speaker Publications:

1. Does BMI really altere the hormonal profil in infertile women? Retrospective study in the region of sidi bel abbes (West Algeria)
2. Impact of environments factors in reproductive function: Protective effect of cinnamon against the mercury chloride induced toxicity in female Wistar rats (ovary and brain)

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