Predictive Scoring for Clomiphene Citrate Response based on Patients' Physical and Hormonal Profile

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ABSTRACT

Background and Objectives: Clomiphene citrate is the first line drug for ovulation induction in WHO Group II subfertile women (normoestrogenic, normogonadotropic). **Objectives:** To compare the physical and hormonal profile of responders and non-responders. To formulate and assess a predictive score for clomiphene citrate (CC) response. **Materials and Methods:** This comparative analytical study was done in the Gynaecology Department, Benazir Bhutto Hospital, Rawalpindi. WHO Group II subfertile women who underwent CC therapy, from January 2016 to January 2017, were selected into two groups; Responders; 30 patients who ovulated and Non-responders; 30 patients who remained anovulatory. Patients with tubal and uterine subfertility were excluded. Menstrual history, BMI, hirsutism and Thyroid Stimulating Hormone (TSH) levels of the patients were studied. Descriptive statistics were calculated using SPSS version 21. Mann Whitney U Test, Independent Sample t Test and Chi Square Test were applied to assess the significance of variables. **Results:** Among Responders, mean BMI was low (23.27¬± 2.46) with 80% patients having normal BMI (≤ 24.9). All responders had TSH levels within the normal range. 93.3% of the responders had regular and 6.7% had irregular menstrual cycles. Hirsutism was present in 16.7% patients. Among Non-Responders, mean BMI was high (27.57± 3.39), where only 10 % had normal BMI (≤ 24.9) while; 63.3% were overweight (BMI 25-29.9) and 26.7% obese (BMI ≥ 30). In this group 43.3% patients had abnormal TSH levels. Similarly, 70% patients had regular and 30% had irregular menstrual cycles. All studied variables were statistically significant between the two groups (p<0.05). A predictive score for CC response was formulated considering these variables. Score 0 was given for all normal variables that is BMI≤24.9, TSH = 0.4-4.2 µU/ml, absence of hirsutism and regular menstrual cycle each. As these parameters became abnormal score 1 or 2 (only for overweight women) was given. Scoring ranged from 0-5. According to the predictive score, all responders had a score from 0 to 2 while 70% of non-responders had a score of 2 and above (p<0.05). **Conclusion:** According to the predictive score, greater the score, lesser the chances to ovulate on CC therapy. Response prior to therapy can be predicted, enabling the doctors to intervene in patient's physical and hormonal factors responsible for decreased response, hence modifying the treatment modalities for ovulation induction.

KEY WORDS:
Clomiphene, Ovulation, Hirsutism, Scoring

Non-Hodgkin's Lymphoma of the Cervix: The Unexpected and Unusual Presentation

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ABSTRACT

Background/Introduction: Female genital tract lymphoma is an extremely rare diagnosis accounting for only 1.5% of extra nodal non-Hodgkin's lymphoma and a meagre less than 0.5% of gynaecological cancer. Primary lymphoma of cervix is considered less common compared to cervical involvement in a multi organ disease3. Majority of these rare cases are diagnosed during routine screening on Papanicolaou (Pap) cytology smear. Due to the limited number of primary lymphoma of the cervix, a standard regime has not been developed5. This is a case report of a 73-year-old non-English speaking background lady who presented to her obstetrician with one month history of post-menopausal bleeding per vaginum. Histology revealed a high grade large B cell non-Hodgkin's lymphoma with a high proliferative index, expressing C-MYC protein in a high proportion of cells and CD10 and LCA positive on a cervical biopsy. **Objectives:** This poster presents the rarity of cervical lymphoma; including its incidence, clinical presentation and diagnostic dilemma from benign conditions as well as treatment regime. Methods (including type of data collected): Case report and literature search/review on Pubmed/MEDLINE. Comparing both in terms of presentation, diagnosis and treatment management. **Results:** Patient has been diagnosed in a timely manner and appropriately managed as well as treated. **Conclusions:** This presentation of cervical diffuse large B cell non-Hodgkin's lymphoma highlights the importance of having an absolute open mind when working up patients presenting with common symptoms in gynaecology like bleeding per vaginum and understanding the different management approaches for these rare conditions.