Human sexuality, fertility and life styles: Billings Ovulation Method contribution in clinical protocols for infertility treatment

Saporosi Aurora (IT) [1], Giuliani Gianluca (IT) [2], Giacchi Elena (IT) [3], Di Segni Chantal (IT) [4], Mancini Antonio (IT) [5], Marana Riccardo (IT) [6]

Context: The Billings Ovulation Method (BOM) allows non-invasive and low-cost monitoring of ovarian function, using cervical mucus symptom as marker of normal or irregular cycles. Objective: To correlate pregnancies obtained by the BOM to prognostic factors influencing cycles regularity, such as age, BMI, previous diagnosis of endocrine/gynecologic pathologies, estroprogestins use (EP) or IVF attempts.

Patients: 155 couples have been enrolled and followed for 12 cycles (or up to pregnancy). Measures: When considering regular (RC) and irregular cycle (IC), women >35 ys showed prevalence of normal length vs younger women (79% in >35 ys vs 62% in <28 ys). BMI analysis revealed a worsen impact of thinness than overweight (RC in 50% vs 80% respectively). In the group with IC, previous EP use was more frequent (70%), but diagnostic investigations started earlier (51% with pregnancy search < 6 months vs 20% > 24 months). Previous pregnancies were not related to menses regularity, while an higher prevalence of IC was observed in couples without other disorders. Results: 109 out of 155 couples achieved pregnancy (59% of women with RC and 41% with IC); 82% IC women conceived; furthermore pregnancy was achieved in a similar time interval by both groups (< 6 months in 86% of RC vs 83% of IC). Previous use of EP was a negative prognostic factor for both cycles regularity (42% of RC and 58% of IC) and for pregnancies (80% occurred in the group with IC that had not assumed EP). Even in couples with previous IVF, pregnancy was achieved with slight prevalence in the group with IC. Conclusions: IC do not necessarily coincide with a worse condition and such couples can benefit from BOM and, as usual mucus symptom abnormal pattern leads to a diagnostic schedule in a shorter period of observation. Previous assumption of EP may have a negative impact on the achievement of pregnancy.

[1] Center for Study and Research on Natural Fertility Regulation, Catholic University School of Medicine, [2] Italian Statistics Institute ISTAT, [3] Center for Study and Research on Natural Fertility Regulation, Catholic University School of Medicine, [4] Dept. Of Internal Medicine, Division of Endocrinology, Catholic University School of Medicine, [5] Dept. Of Internal Medicine, Division of Endocrinology, Catholic University School of Medicine, [6] Center for Study and Research on Natural Fertility Regulation, Catholic University School of Medicine