

# 17th World Congress of the Academy of Human Reproduction

15–18 March 2017 Rome, Italy

### TITLE

# MANAGING SUBFERTILITY: USE OF THE BILLINGS OVULATION METHOD AS DIAGNOSTIC TOOL

### AUTHOR/S

Saporosi A (IT) [1], Giacchi E T (IT) [2], Mancini A (IT) [3], de Waure C (IT) [4], Giuliani G (IT) [5], Marana R (IT) [6]

## **ABSTRACT**

Context. The Billings Ovulation Method (BOM®) is a modern method of Natural Fertility Regulation (NFR) that has been subjected to high standard research, demontrating high correlation between cervical mucus and hormonal ovarian pattens in any phase of reproductive life.

Objective. To investigate the correlation between any abnormal pattern identified by BOM® and the underlying ovarian hormons secretion in some subfertility situations, such as premenopausal women and couples looking for a pregnancy.

Methods. Mucus symptom charting by BOM® and daily assays for Estrone1Glucuronide (E1G) and Pregnanediol Glucuronide (PdG) in single timed urine samples.

Patient(s). 3 groups of BOM® users (25 normal, 18 premenopausal, 25 subfertile).

Intervention(s). The cycles were examined for length, preovulatory E1G baseline, ovulation day by hormone assays, ovulation day by BOM® Peak Day, luteal phase length, mid-luteal PdG.

Main Outcome. Comparison of fertile and infertile phases, ovulation time and luteal adequacy of each cycle in the 3 groups.

Measure(s). E1G and PdG immunoenzymatic assays by the Brown's Ovarian Monitor (electronic photometer).

Result(s). Preovulatory E1G levels were similar in all groups (mean value 126.7  $\pm$ 1.15 SD nmol/24hr); premenopausal and subfertile groups showed higher frequency of longer cycles and delayed ovulation, wide variability of luteal phase length and inadequate mid-luteal PdG (mean values: normal = 20.8 $\pm$ 7.5 SD ?g/24hr; premenopausal = 14.9 $\pm$ 8.9 SD ?g/24hr; subfertile = 15.7 $\pm$ 7.9 SD ?g/24hr).

Conclusions. The premenopausal women present some characteristics of cycles comparable with subfertile women. The BOM® allows evaluations comparable to laboratory assays; therefore it represents a useful tool in diagnosis of ovulation disorders and luteal function adequacy.

# INSTITUTE

[1] Catholic University of the Sacred Hearth, Center for Study and Research for Natural Fertility Regulation - Rome, [2] Catholic University of the Sacred Hearth, Center for Study and Research for Natural Fertility Regulation - Rome, [3] Catholic University of the Sacred Hearth, Operative Unit of Endocrinology - Rome, [4] Catholic University of the Sacred Hearth, Dept. of Public Health - Rome, [5] Italian Institute of Statistics - Rome, [6] Catholic University of the Sacred Hearth, Center for Study and Research for Natural Fertility Regulation - Rome