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MONITORING OF OVULATION BY SOPHISTICATED DIGITAL ELECTRONIC BBT RECORDING, BABY- COMP IN PATIENTS WITH UNEXPLAINED INFERTILITY

S. Dessole, MC. Fadda, N. Rosas, A.Scapinelli, P. Inaudi and A. Amibrosini.
Institute of Obstetrics and Gynaecology, University of Sassari.

Basal body temperature record has been widely used in first level management of couple infertility for prediction and detection of the ovulation and for the diagnosis of luteal deficiency. Recently devices have been developed which utilize oral thermometers connected with microcomputers giving informations about the fertile and non- fertile phase of the cycle, whether ovulation has been occurring, the possibility that a conception has occurred and the probable date of conception and delivery. In this study is evaluated the use of BABY-COMP, an electronic sophisticated device for record BBT temperature in patients with unexplained infertility.

MATERIALS AND METHODS
A total of 10 women aged from 25 to 34 years, with unexplained sterility from 3 to 8 years were included in this study. Patients were followed ambulatoriarly for 3 cycles and were totally analysed 30 cycles.

RESULTS
By the integration of data obtained by ultrasound, by urinary LH and by serum progesterone assessment, on 30 cycles examined 26 (86%) were ovulatory and 4 unovulatory, 3 of the 26 cycles showed a luteal deficiency. There were 3 (10%) pregnancies, one was an abortion. Data pointed by BABY COMP showed ovulatory cycles in 24 cases (80%), unovulatory in 4, in 2 uninterpretable, a luteal deficiency in 3. Luteal deficiency showed agreement with plasmatic progesterone of about 100%. In the 3 cases of pregnancy the computer showed this state 10-16 days after LH surge. All patients thought that this device utilization is easy, less tiresome than traditional thermometer recording and with more enthusiasm for the informations that it can give.

Conclusions:

The graph abtained by recording BBT allows to get at glance a pattern of menstrual cycle, the ovulation occured, the lenght of the luteal phase, shows the frequency and the timing of sex intercourse, can provide useful informations about the time to effect postcoital test to plan a endometrical biopsy, useful to interpret hormonal determinations and to evaluate the effects of ovulation inductors. This method has the advantage of the simplicity of the non-invasivity and the low cost. On the other hand the reproductibility was criticised which depends from how temperature recording is effected and from the graphic interpretation by clinician. Computer analysis by computer based mathematical algorithms can improve the reproducibility. The Baby-Comp that we evaluated seems a device easy to use, reliable, well accepted by patients, moreover the graph give useful information to the clinician. We considered a disadvantage to can not print directly the graph, but having to send the device to the tradesman and the cost not really negligible. We believe all together that this device is a great help in the management of unexplained infertility and that it could be applied in first time, then method reproducibility is better. In this study is evaluated the use of Baby-Comp, an electronic sophisticated device for record BBT temperatures in patients with unexplained infertility.

We believe all together that this device is a great help in the cycle monitoring and that it could be applied in first level diagnosis in unexplained infertility.

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