The study was financially supported by Fertility Focus Ltd. and associations between patterns.

Materials and Methods

10,463 ovulatory cycles from 6,647 OS users aged 20 to 52 (if age provided), with cycle length 11 to 190 days (90% 22 to 47 days).

Participants used OS vaginally at night to monitor Core Body Temperature (CBT), having voluntarily been asked to provide date of birth and identify how long they had been trying to conceive before OS use. OS produces a representative “raw” CBT for each night of recordings taken every 5 minutes, which are then assessed with a proprietary moving average calculation to produce a “smooth” CBT analysis curve.

The main outcome measures were: proportions of normal and atypical OS CBT patterns as classified by observation of the smooth curve and applied mathematical criteria, frequency of their occurrence, and associations between patterns.

Support

The study was financially supported by Fertility Focus Ltd.

Conclusions

It is likely OS continuous vaginal temp patterns closely reflect luteal progesterone changes, hence describe subtle progesterone secretion or metabolism anomalies, which not yet have been recognised.

(a) suggests high progesterone early in the cycle,
(b) suggests an initial LH surge and accompanying small progesterone rise may not always be followed by ovulation within 48 hours. (a) and (b) would be expected to occur in women with PCOS, and further studies are planned to examine this within the OS population.
(c) suggests that progesterone may fall sharply in some women before onset of menses, and it is possible that fertilility may be impaired in these cycles.

The co-existence of SLP with patterns (a), (b), and/or (c) indicates vaginal, core-body temp monitoring may represent a promising method of identifying previously undetectable causes of infertility in women with “normal” ovulation. It should also be noted that ovulation generally occurs much later in each of these patterns than the “textbook” middle of the cycle.

References