Use of salivary estrogen levels for contraception

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Context
Urinary testing methods measure the concentration of e.g. luteinizing hormone (LH), in order to identify the ovulatory period. Saliva-tests show ferning pattern during the fertile period, caused by NaCl, which cyclically increases under the influence of estrogen.

Objective
Is the saliva-test, Geratherm ovu control, for contraception as safe as the established urinary LH-test?

Methods
The women used Geratherm ovu control, a small plastic hand-held microscope for detecting the fertile period. A drop of saliva from sublingual was put onto the lens of the microscope. Three results were possible: non fertile (dot patterns), transitional and fertile (ferning patterns). The participants performed the saliva-test from the 5. till the 22. day of the menstrual cycle and noted the respective result in a table. In addition to Geratherm ovu control, EXACTO test for determining urinary LH-concentration and the time of peak fertility was accomplished.

Patients
The participants were 74 volunteer, healthy women with regularly menstruation cycles and without using any hormonal contraceptives.

Main Outcome Measures
Positive LH in comparison to positive Saliva and questionable positive Saliva shows an approximately congruent curve.

Results
Positive LH shows a sharp increase beginning at the 10. cycle day (2 participants) with a maximum at the 17. cycle day (37 participants). The curve for positive saliva and questionable positive saliva (one curve) is moved approximately in parallel with a maximum at the 16. cycle day (35 participants).

There is a high conformity for the same test results from the 5. (100 %) till the 14. (84 %) cycle day, as well as for the 18. (80 %) till the 22. (96 %) cycle day, which describes the pre- and post-ovulatory period.

Conclusions
Salivary ferning patterns can be used for contraception. Our results show high congruence in the pre- and post-ovulatory period. The saliva test is comparable to the well-established urinary LH-test.