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Several studies have shown that gels used to treat vaginal dryness are liable to affect the motility, chromatin integrity and kinetic parameters of human spermatozoids to varying degrees.

The chemical-physical elements that play a role in the mechanism for reducing motility are principally a drop in pH and a change in ionic strength. In our study, we compared different commercially available lubricants (Felis, Replens and Pre-Seed) with a gel routinely used by gynaecologists during vaginal US (Aquasonic).

Several concentrations of these products were tested in an HTF medium to which albumin was added (10% SSS), and were also subjected to two periods of exposure (1 hr and 24 hrs). In order that all of the solutions tested should be subjected to identical handling, we selected the weakest C1 concentration (0.083%) as the control.

Taken together, these conditions allow the motility of spermatozoids to be maintained in the controls for 24 hours at values close to those at time 0. In our study, Replens lubricant and the Aquasonic US gel have a negative effect on the motility of spermatozoids even at the weakest concentrations (C2, C3 and C4).

The Felis lubricant, in contrast, exercises a negative action at higher concentrations, i.e. C3 and C4. Pre-Seed, on the other hand, has no negative effect on the survival of spermatozoids at any of the concentrations tested. In conclusion, of all of the gels and lubricants tested, Pre-Seed appears to guarantee optimal conditions for the survival of spermatozoids in vitro and can be recommended by gynaecologists to infertile patients suffering from vaginal dryness.

The negative role of the gels used for vaginal US poses a significant problem, because these are regularly used for echographs to monitor ovarian stimulation in infertile patients.

The November 2008 Fertility and Sterility Journal Supplement of the 2008 Compendium of Practice Committee Reports, included a report on "Optimizing Natural Fertility". In this report, Pre-Seed was the only commercial lubricant specifically mentioned for use while trying to conceive and as not harming sperm. These reports represent best practice guidelines from the American Society of Reproductive Medicine. Specifically, this article abstract states, "This committee's opinion provides practitioners with suggestions for optimising the likelihood of achieving pregnancy in couples attempting conception who have no evidence of infertility." *Fertil Steril 2008;90:S1-6.*