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Okayama University research: The nature of female squirting

(Okayama, 27 March) **Researchers at Okayama University report in the *International Journal of Urology* insights into the mechanism of female squirting — the discharge of fluid during an orgasm. Squirting fluid was found to consist mainly of urine but often accompanied by a liquid secreted from the female prostate.**

Squirting refers to the expulsion of liquid by a woman during an orgasm. Although the phenomenon has been known for a very long time — it is mentioned in Chinese Taoist texts of the 4th century — the mechanism of squirting is still poorly understood. Now, Dr. INOUE Miyabi (Miyabi Urogyne Clinic, Okayama) and Professor ARAKI Motoo (Okayama University & Okayama University Hospital) from Research teams and colleagues have investigated squirting in more detail. They managed to visually record the process of liquid expulsion by a sexually stimulated woman. They also analyzed the chemical content of the expelled liquid, and confirmed that it consists of urine and fluid from organs known as Skene's glands.

Squirting should be distinguished from urinary incontinence — the latter may cause urine loss during sexual intercourse (then referred to as coital incontinence) but is a different phenomenon. It is also distinct from female ejaculation, which is the discharge of a small amount of (milky) fluid originating from Skene's glands, also known as the female prostate, located near the lower end of the urethra (a tube connected to the urinary bladder). The amount of expelled liquid in squirting can be up to several hundreds of milliliters.

Five women between 30 and 60 years old and able to squirt participated, on a voluntary basis, in the study of Inoue and colleagues. Before sexual stimulation, a urethral catheter was inserted into the bladder. The bladder was then emptied, after which a blue dye was injected. Sexual stimulation was done manually by the participant (in 3 cases) or through sexual intercourse with a male sex partner (in 2 cases).

All women confirmed that they did not have a sensation of urinary incontinence during squirting. The researchers were able to record one instance of squirting on video. In all cases, squirted fluids were blue, indicating that at least a part of the liquid consisted of urine. In four out of the five cases, the squirted fluids also contained a compound called PSA (prostate specific antigen), which is a component of the liquid secreted by Skene's glands and not present in urine.

The study confirms that squirted liquid mainly consists of urine, but may also contain secretion from Skene's glands. One point that could not be resolved, however, is its glucose content — it has been reported earlier that glucose is present in female ejaculates, but not in squirting fluids. The scientists point out that collecting a representative sample is difficult,

because some women are unable to squirt when manually stimulated, which is the easiest situation for collecting samples, and because the direction of squirting is variable. Quoting the scientists: “The components in the squirted liquid have not been [completely] established; further research is thus warranted.”

Background

It is known that during an orgasm, a woman can suddenly release a liquid consisting partly of urine, a phenomenon called squirting. Although squirting is sometimes referred to as female ejaculation, the latter is a different process, in which fluid secreted from Skene’s glands leaves the body during or before an orgasm. Squirting and female ejaculation have been poorly researched; the nature of squirting and the composition of squirting fluid are not completely understood. This is due to a lack of common definitions used by medics, limited case studies, and small sample sizes.

Dr. INOUE Miyabi and Professor ARAKI Motoo from Research teams and colleagues have now investigated squirting in more detail. Their study involved the participation of 5 women who were able to squirt upon sexual stimulation. Analyses of the squirting fluids revealed that they always consist of urine, but often also contain liquid secreted from Skene’s glands.

TABLE 1

Case	Urine (ng/ml)	Squirted fluids (ng/ml)
① 40s	0.01↓	7596.59
② 50s	0.01↓	1.94
③ 40s	0.01↓	0.07
④ 30s	0.01↓	0.01↓
⑤ 30s	0.01↓	0.39

Note: Squirted fluid was PSA-positive in four women and PSA-negative in one woman. One woman had a very high PSA level.

TABLE 2

Case	Urine (ng/ml)	Squirted fluids (ng/ml)
① 40s	Unmeasured	Unmeasured
② 50s	4	2
③ 40s	3506	1735
④ 30s	3	2
⑤ 30s	8	5

Note: The glucose concentration was not different between urine and the collected fluid in this study.

Table

1) PSA level in squirted fluid.
2) Glucose level in squirted fluid.

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Reference

Miyabi Inoue, Yuki Sekiguchi, Noriko Ninomiya, Tomoko Kobayashi, Motoo Araki. Enhanced visualization of female squirting. *International Journal of Urology*, 2022 Aug 24.
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Okayama University is one of the largest comprehensive universities in Japan with roots going back to the Medical Training Place sponsored by the Lord of Okayama and established in 1870. Now with 1,300 faculty and 13,000 students, the University offers courses in specialties ranging from medicine and pharmacy to humanities and physical sciences.

Okayama University is located in the heart of Japan approximately 3 hours west of Tokyo by Shinkansen.

Website: http://www.okayama-u.ac.jp/index_e.html

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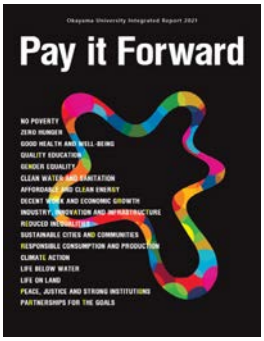

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