

Case Report

Male squirting: Analysis of one case using color Doppler ultrasonography

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Abbreviations & Acronyms

mSQ = male squirting

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Introduction: There is no scientific evidence for the mechanism of male squirting, although the term is common in mass media. Here, we describe the first recording of male squirting using color Doppler ultrasonography.

Case presentation: We recruited a 25-year-old male volunteer who was able to have male squirting. A transrectal ultrasound probe was inserted into the rectum and male squirting was observed following normal ejaculation. With penis stimulation for a further 20 s after ejaculation, translucent misty fluids with a creatine level similar to that of urine came from the extraurethral orifice for about 60 s. Color Doppler ultrasonography recorded strong contraction of the prostate and pelvic striated muscles just before male squirting, and then the stream went from the urinary bladder through the prostatic urethra.

Conclusion: In male squirting, urine in the bladder gushes out from the external urethral orifice due to strong contraction of the prostate and pelvic striated muscles.

Key words: color Doppler ultrasonography, ejaculation, male squirting, pelvic striated muscles, prostate.

Keynote message

Female ejaculation or squirting is a well-known phenomenon among urologists, but there are no scientific articles on mSQ, despite this term being widely used in mass media. In this case study, we describe the first recording of mSQ using color Doppler ultrasonography. We show that mSQ is a phenomenon in which urine in the bladder gushes out from the external urethral orifice due to strong contraction of prostate and pelvic striated muscles, if penile stimulation is continued after ejaculation. These results provide the first scientific basis for a publicly known phenomenon.

Introduction

Female ejaculation or squirting is a well-known term among sexologists, gynecologists, and urologists.¹ During sexual intercourse, women expel various kinds of fluids from external genitalia. Pastor differentiated those fluids into three types:^{2,3} female ejaculation, which is secretion of a small volume of thick, milky fluid by the female prostate (Skene's glands) during orgasm; squirting, which is defined as the orgasmic transurethral expulsion of a small volume of a form of urine; and a third phenomenon of coital intercourse, which is caused by stress urinary incontinence or detrusor hyperactivity during penetration and orgasm.

In contrast, there are no scientific articles and information on mSQ, as far as we know, although the term is well known in the sex industry and can be found on the internet and in various mass media. The phenomenon of mSQ is flushing of fluid from the external urethral orifice during penile stimulation, even after semen ejaculation. The fluid is usually transparent and spurts out like mist. In this study, we recorded mSQ using a color Doppler ultrasound device.

Case report

Under the approval of the ethics committee of Kawasaki Medical School (approval number 2723), a 25-year-old male volunteer who was able to have mSQ was recruited. The volunteer laid down on a bed in the lithotripsy position and a transrectal ultrasound probe was inserted into the rectum.⁴ The penis was manually stimulated by a female assistant. Normal spurting of semen was induced with orgasm, and after ejaculation penile stimulation continued and the penis remained erect during manual stimulation by the female assistant. The phenomenon of squirting was induced 20 s after normal ejaculation.

Antegrade ejaculation was clearly observed and was identical to that observed in healthy males, as reported in our previous studies.^{4,5} Briefly, the bladder neck flattened and closed in association with contraction of the prostate before ejaculation. Immediately afterwards, rhythmical ejection of seminal fluid from the seminal vesicles through the ejaculatory duct and into the bulbous urethra was observed (Fig. 1).

The squirting phenomenon (mSQ) was also clearly observed in Doppler image analysis. With continued stimulation of the penis for 20 s after ejaculation, translucent misty fluids came out from the extra-urethral orifice for about 60 s. Color Doppler ultrasonography recorded strong contraction of the prostate and pelvic striated muscles just before mSQ, and then the fluid stream rapidly went from the urinary bladder through the prostatic urethra (Fig. 2). Subsequently, approximately 1 cm ballooning of the prostatic urethra was observed. Rhythmical contraction and slackness of the prostate and

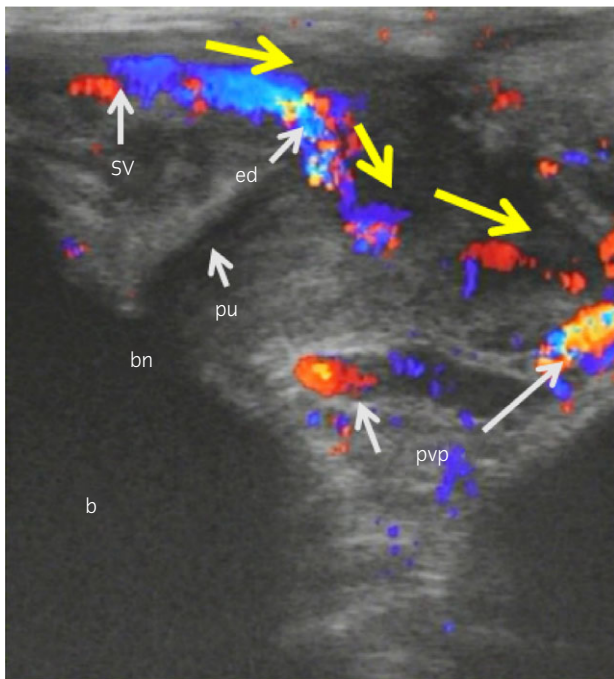


Fig. 1 Normal ejaculation: Rhythmical ejection of seminal fluid and contraction of the pelvic floor muscles approximately 15 times. Yellow arrow is a flow of semen. Bladder (b), bladder neck (bn), prostatic urethra (pu), seminal vesicle (sv), prostatic venous plexus (pvp), ejaculatory duct (ed).

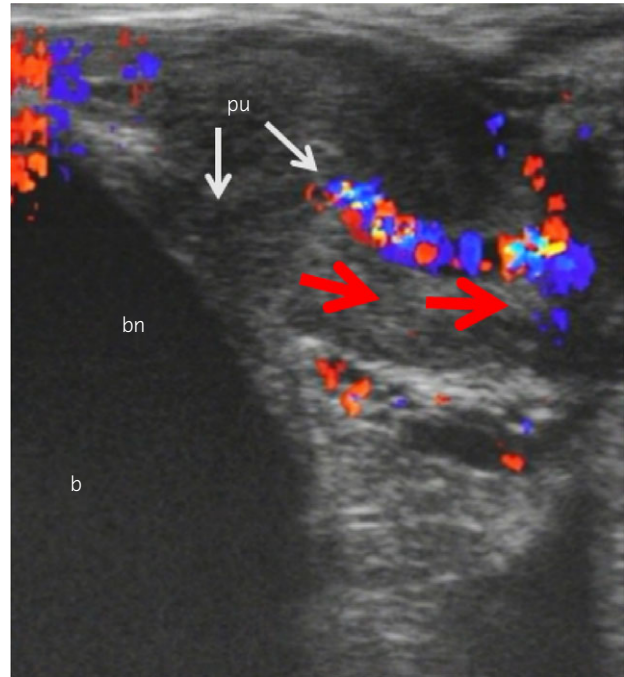


Fig. 2 Male squirting: The fluid stream rapidly went from the urinary bladder through the prostatic urethra.

pelvic striated muscles were repeated around 20 times for 60 s (Figs 3,4). In other words, mSQ of gushing of fluid from the extra-urethral orifice synchronized contractions, with this series resembling pumping of urine. The bladder neck remained closed during mSQ. At the end of mSQ, the neck opened and the configuration of the prostate returned to its former state at 30 s after the end of mSQ. Therefore, the open bladder neck may be a sign of the end of mSQ. The volunteer felt orgasm during mSQ similar to normal ejaculation and urination after patience with urination. The creatinine level in the misty fluid was 55.9 mg/dL, which was similar to that of urine. The bladder was not empty. The decrease of approximately 100 mL of echographic urine volume in the bladder was observed.

Discussion

In this case, we observed the phenomenon of mSQ using a scientific approach. We have previously investigated human ejaculation using a color Doppler ultrasound device,⁴⁻⁷ including analysis of normal male ejaculation and ejaculation dysfunction such as retrograde ejaculation and orgasm disorder. Using a similar approach, in this case, we succeeded in recording mSQ after normal ejaculation for the first time in the medical literature. mSQ is a unique phenomenon: first, the prostatic urethra dilates due to initial contraction of the prostate and pelvic striated muscles following ejaculation under continued penile stimulation; second, this urethral dilatation sucks urine from the urinary bladder through the bladder neck (ballooning of the prostatic urethra); and finally the accumulated urine in the dilated prostatic urethra rhythmically gushes out from the external urethral orifice because of strong successive contractions of the prostate and pelvic

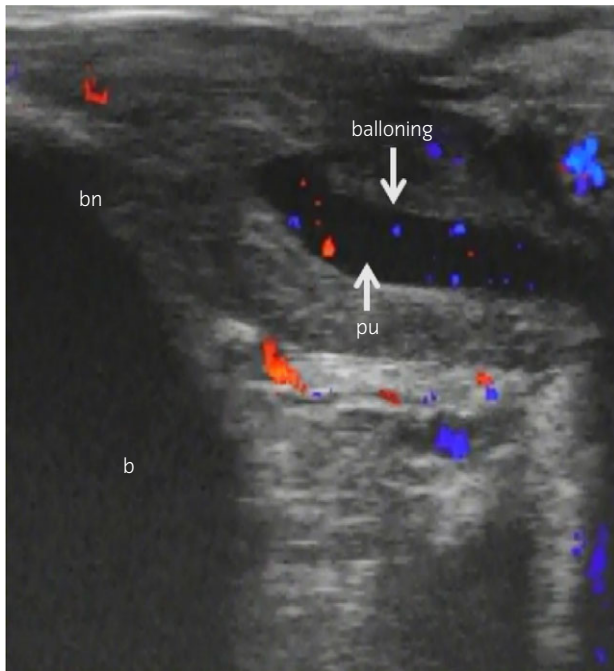


Fig. 3 Male squirting (slackness phase): Approximately 1 cm ballooning of the prostatic urethra was observed.

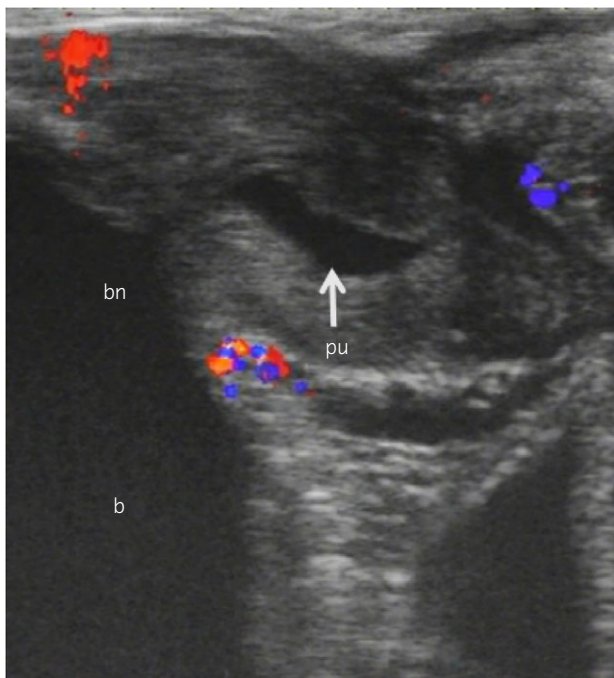


Fig. 4 Male squirting (contraction phase): Rhythmical contraction of the prostate and pelvic striated muscles was repeated.

striated muscles and slackness of the urethral sphincter following closing of the bladder neck.

This study is the first to prove that urine is the fluid in mSQ, based on the similar creatinine levels in mSQ fluid and urine. The prostate and pelvic muscles contracted more easily

than we expected, with stronger contraction of these muscles during mSQ compared to normal ejaculation.^{4,5} These contractions may have a central role in mSQ. Orgasm is also associated with powerful and highly pleasurable pelvic muscle contractions (especially ischiocavernosus and bulbocavernosus), along with rectal sphincter contractions.^{8–10} The volunteer felt orgasm during mSQ. Further anatomical and physiological investigations of mSQ are needed, especially with regard to the mechanism of nervous control for repetition of contraction and distension of the prostate and pelvic striated muscles, and to establish more details of the prostate anatomy.

In conclusion, mSQ is a phenomenon in which urine in the bladder gushes out from the external urethral orifice due to strong contraction of prostate and pelvic strained muscles, if penile stimulation is continued after ejaculation, and orgasm appears at this time. In this case, we were able to observe this phenomenon using color Doppler ultrasonography. However, not every male may be able to experience mSQ. mSQ would need special technique or physical constitution, and further evaluation of the mechanism is required.

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Conflict of interest

The authors declare no conflict of interest.

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