Five meters of H(2)O: the pressure at the urinary bladder neck during human ejaculation.

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BACKGROUND: There are no data in the literature on pressure changes in the prostatic urethra during ejaculation. In healthy men, it has always been postulated that there must be a pressure gradient in order to prevent retrograde ejaculation, but scientific proof for that is pending. METHODS: In five healthy male volunteers, the pressure profile in the prostatic urethra was registered during ejaculation, using a 10 French balloon catheter with 16 pressure channels. The channels were arranged in pairs at 5-mm intervals, beginning just below the balloon at the bladder neck and extending down to the external urethral sphincter. RESULTS: In the proximal part of the prostatic urethra, a pressure of up to 500 cm of H(2)O was measured in all subjects. Contrary to that, pressures did not exceed 400 cm of H(2)O distally to the verumontanum. CONCLUSIONS: A novel method to register the pressure profile in the lower urinary tract during ejaculation (ejaculomanometry) is presented. This study adds to the knowledge of the normal physiology of reproductive function and may be useful in the evaluation of male sexual and reproductive disorders. Copyright 2000 Wiley-Liss, Inc.