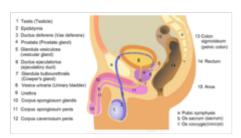


Urinary meatus

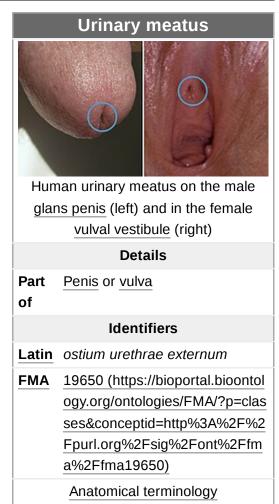
The **urinary meatus**^[a] (/miː'eItəs/, mee-AY-təs; pl.: **meatus** or **meatuses**), also known as the **external urethral orifice**, is the opening where <u>urine</u> exits the male and female <u>urethra</u>. It is where <u>semen</u> also exits the male urethra. The meatus has varying degrees of sensitivity to touch.

In human males



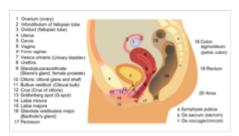
Drawing of male internal sexual anatomy

The male external urethral orifice is the external opening of the urethra, normally located at the tip of the glans penis, [1] at its junction with the <u>frenular delta</u>. It presents as a vertical slit, possibly bounded on either side by two small labia-like projections, and continues longitudinally along the front aspect of the glans, which facilitates the flow of urine <u>micturition</u>. In some cases, the opening may be more rounded. This can occur



naturally or may also occur as a side effect of excessive skin removal during circumcision. The meatus is a sensitive part of the male reproductive system.

In human females



Lateral anatomical view of the female reproductive system

The female external urethral orifice is the external opening of the <u>urethra</u>, from which <u>urine</u> is ejected during <u>urination</u>. It is located about 2.5 cm (1 in) behind the <u>clitoris</u> and immediately in front of the <u>vaginal opening</u> in the <u>vulval vestibule</u>. It usually assumes the form of a short, <u>sagittal</u> cleft with slightly raised margins. To its left and right are the openings of the Skene's glands.

Some evidence exists to suggest that the <u>clitoral-urinary meatus</u> <u>distance</u> (CUMD) in human females relates to the ease with which the female may achieve orgasm through penetrative sex. Orgasm

from penetration alone is observed to be more likely as CUMD decreases. [2]

Evidence also suggests that decreased distance from the vaginal opening to the urethral meatus is associated with recurrent post-coital urinary tract infections. [3] Surgical repositioning of the distal urethra to prevent recurrent post-coital urinary tract infections has been employed with some success by Russian physicians. [4]

In other mammals

Unlike most other mammals (including human), female <u>spotted hyenas</u> have a urinary meatus that is located on the clitoral glans. [5][6]

Clinical significance

Congenital disorders of the meatus, in the male, include epispadias (the misplacement to the upper aspect) and hypospadias (the misplacement to the underside of the penis). A congenital misshaping can result in its narrowing (meatal stenosis), causing a partial or total urinary blockage or the bifurcation of the urinary stream. A urethral blockage can also be caused by foreign material, <a href="https://www.kidney.numer.com/kidney.numer.com

See also

Urogenital opening

Notes

a. Meatus refers to a tubular opening or passage in the body. From Latin **meātus**: a course, passing.

References

- Lombardi, Julian (2012-12-06). <u>Comparative Vertebrate Reproduction</u> (https://www.google.c om/books/edition/Comparative_Vertebrate_Reproduction/tXvjBwAAQBAJ?hl=en&gbpv=1& dq=meatus&pg=PA102&printsec=frontcover). Springer Science & Business Media. ISBN 978-1-4615-4937-6.
- 2. Wallen, Kim; Lloyd, Elisabeth A. (2017-03-13). "Female Sexual Arousal: Genital Anatomy and Orgasm in Intercourse" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3894744). Hormones and Behavior. **59** (5): 780–792. doi:10.1016/j.yhbeh.2010.12.004 (https://doi.org/10.1016%2Fj.yhbeh.2010.12.004). ISSN 0018-506X (https://www.worldcat.org/issn/0018-506X). PMC 3894744 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3894744). PMID 21195073 (https://pubmed.ncbi.nlm.nih.gov/21195073).
- 3. Gyftopoulos, K; Matkaris, M (2019). "Clinical implications of the anatomical position of the urethra meatus in women with recurrent post-coital cystitis: a case-control study". *Int Urogynecol J.* **30** (8): 1351–1357. doi:10.1007/s00192-018-3710-7 (https://doi.org/10.1007% 2Fs00192-018-3710-7). PMID 29968091 (https://pubmed.ncbi.nlm.nih.gov/29968091). S2CID 49559889 (https://api.semanticscholar.org/CorpusID:49559889).
- 4. Sumerova, Natalia; Pushkar, Dmitry (2011). "Transposition of Distal Urethra in Female Patients with Recurrent Lower UTI Associated with Sexual Intercourse". *Clinical Management of Complicated Urinary Tract Infection*. doi:10.5772/22301 (https://doi.org/10.5772/22301). ISBN 978-953-307-393-4. S2CID 44044908 (https://api.semanticscholar.org/CorpusID:44044908).

- 5. Cunha, Gerald R.; et al. (2014). "Development of the external genitalia: perspectives from the spotted hyena (Crocuta crocuta)" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4069199). Differentiation. 87 (1): 4–22. doi:10.1016/j.diff.2013.12.003 (https://doi.org/10.1016%2Fj.diff.2 013.12.003). PMC 4069199 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4069199). PMID 24582573 (https://pubmed.ncbi.nlm.nih.gov/24582573).
- 6. Drea, C. M.; et al. (2002). "Exposure to naturally circulating androgens during foetal life incurs direct reproductive costs in female spotted hyenas, but is prerequisite for male mating" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1691120). Proceedings of the Royal Society of London B: Biological Sciences. 269 (1504): 1981–1987. doi:10.1098/rspb.2002.2109 (https://doi.org/10.1098%2Frspb.2002.2109). PMC 1691120 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1691120). PMID 12396496 (https://pubmed.ncbi.nlm.nih.gov/12396496).

Retrieved from "https://en.wikipedia.org/w/index.php?title=Urinary_meatus&oldid=1233425601"