

Phylogenetic disorders of human male reproductive system

**MEDICAL ACADEMY NAMED AFTER S.I. GEORGIEVSKY
OF VERNADSKY CFU**

DEPARTMENT OF MEDICAL BIOLOGY

COURSE STUDENT

MUVAHID

Scientific Leader

ANNAS ZHUKOVA



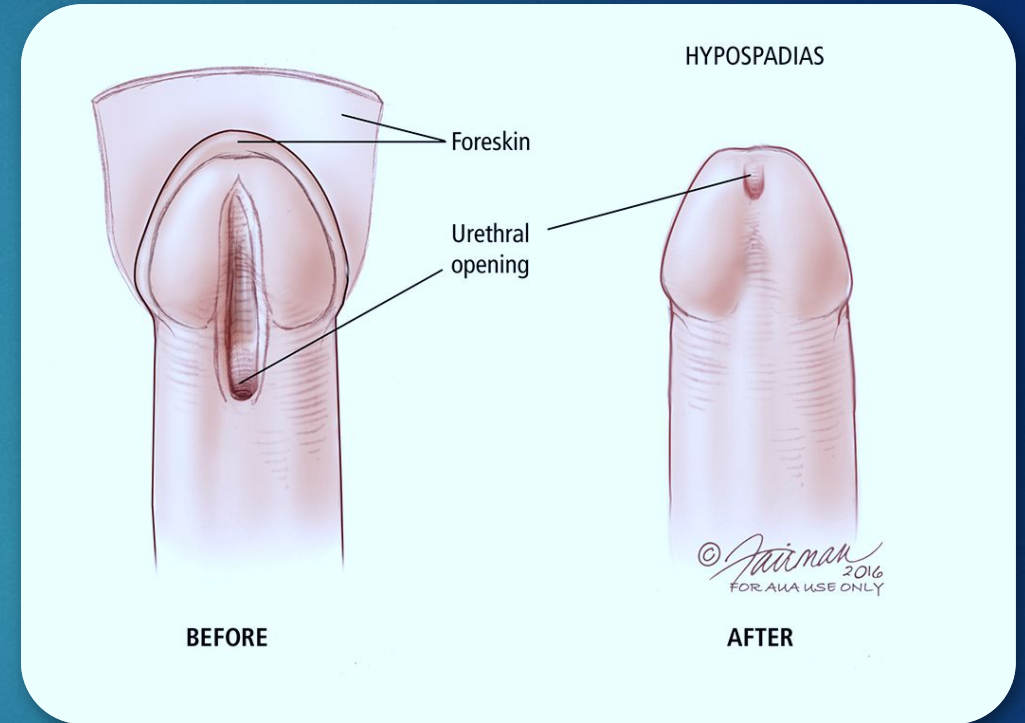
Male Reproductive Issues include:

- ❑ PROSTATE CANCER
- ❑ TESTICULAR CANCER
- ❑ ENLARGED PROSTATE OR BPH
- ❑ PROSTATITIS
- ❑ ERECTILE DYSFUNCTION
- ❑ MALE INFERTILITY
- ❑ TESTOSTERONE DEFICIENCY
- ❑ UNDESCENDED TESTICLE
- ❑ VARICOCELE OR DILATED VEINS AROUND TESTICLE
- ❑ HYDROCELE OR FLUID AROUND TESTICLE



Hypospadias

- ▶ LITERALLY “BELOW THE FLESHY SPIKE.” A CONDITION IN WHICH THE EXTERNAL URINARY MEATUS (OPENING) OPENS ANYWHERE BELOW THE TIP OF THE PENIS RATHER THAN AT THE TIP.

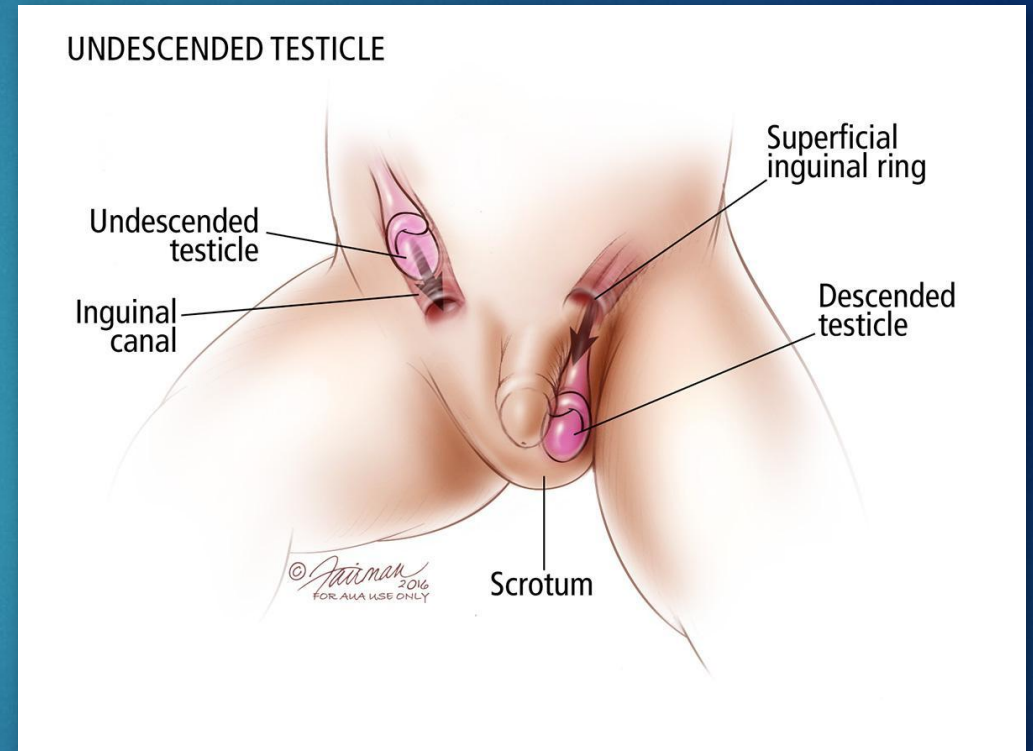


Varicocele

- ▶ **VARICOCELE** – DILATED AND TWISTED VEINS OF THE TESTIS, SORT OF “HEMORRHOIDS” OF THE SCROTUM! MANIFESTS ITSELF AS A SWELLING ON THE SIDE OF THE SCROTUM WHICH MAY LOOK AND FEEL LIKE A “BAG OF WORMS.” MAY BE SURGICALLY CORRECTED IF CAUSING DISCOMFORT. THIS CONDITION MAY ALSO CAUSE REDUCED SPERM COUNT AND MALE STERILITY DUE TO SLUGGISH BLOOD FLOW ELEVATING TESTICULAR TEMPERATURE.

Cryptorchidism

- ▶ **CRYPTORCHIDISM** – LITERALLY “HIDDEN TESTICLE.” A CONDITION OF LACK OF DESCENT OF ONE OR BOTH TESTES INTO THE SCROTUM. IF NOT CORRECTED, USUALLY BY SURGERY, BEFORE PUBERTY, CAN LEAD TO STERILITY AND INCREASED RISK OF TESTICULAR CANCER.



Benign prostatic hypertrophy

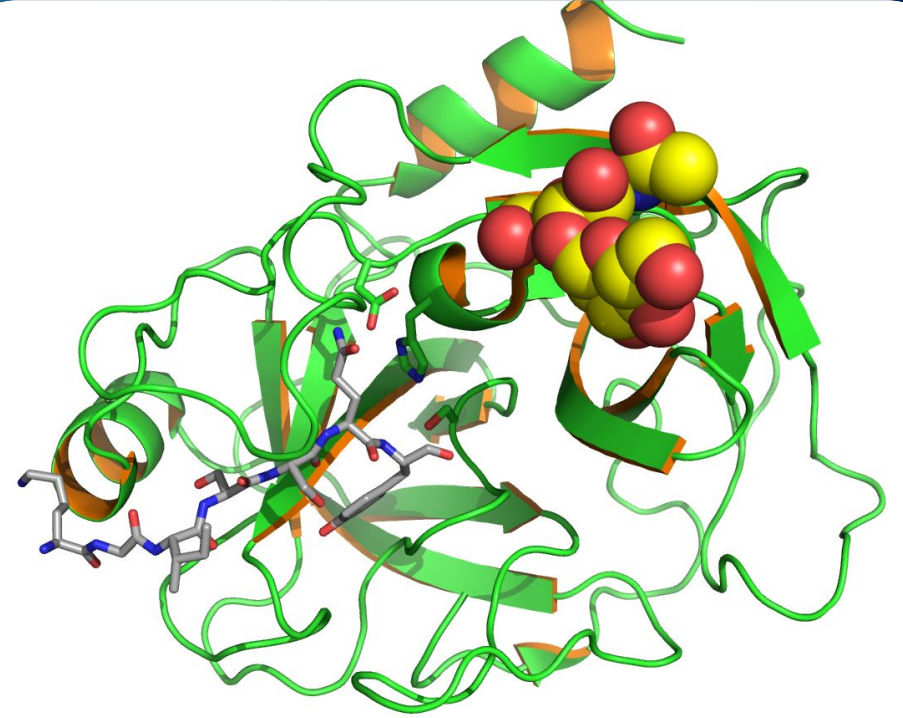
- ▶ **BENIGN PROSTATIC HYPERTROPHY (BPH)**
 - SWELLING OF THE PROSTATE GLAND WHICH SURROUNDS THE BASE OF THE MALE BLADDER AND URETHRA CAUSING DIFFICULTY URINATING, DRIBBLING, AND NOCTURIA (REMEMBER THAT WORD? SEE URINARY SYSTEM). THE BANE OF OLD MEN! BPH BECOMES MORE COMMON AS MEN AGE.

Transurethral resection of the prostate

- ▶ *TRANSURETHRAL RESECTION OF THE PROSTATE (TURP) – THE SURGICAL CURE FOR BPH. AN INSTRUMENT INSERTED THROUGH THE PENILE URETHRA IS USED TO PARTIALLY CUT AWAY THE PROSTATE TO RELIEVE OBSTRUCTION OF THE URINARY TRACT.*

Prostate Specific Antigen

- ▶ **PROSTATE SPECIFIC ANTIGEN (PSA)** – PSA IS A MARKER PROTEIN FOR PROSTATE CELL SECRETIONS WHICH CAN BE DETECTED WITH A LAB TEST. A RISING PSA MAY BE AN EARLY SIGN OF PROSTATE CANCER, ALTHOUGH THERE MAY BE OTHER CAUSES INCLUDING FALSE POSITIVE TESTS. HOW OFTEN SHOULD MEN GET A PSA TEST? CHECK IN WITH THE PROSTATE CANCER FOUNDATION

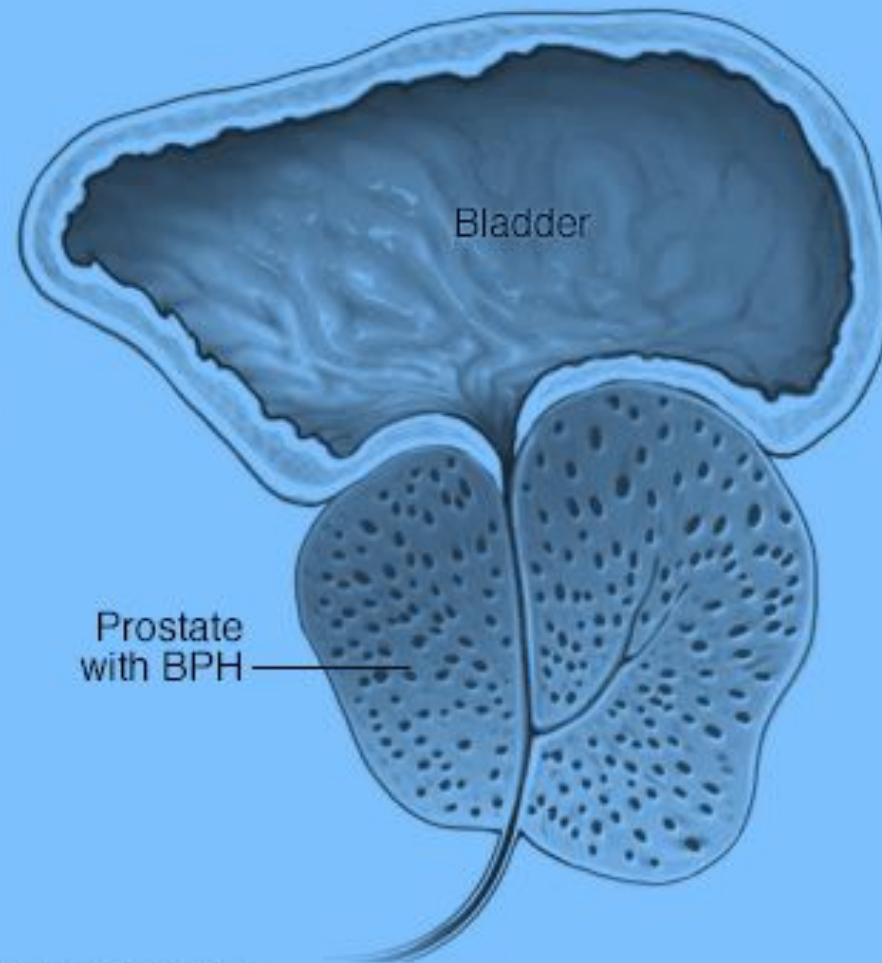
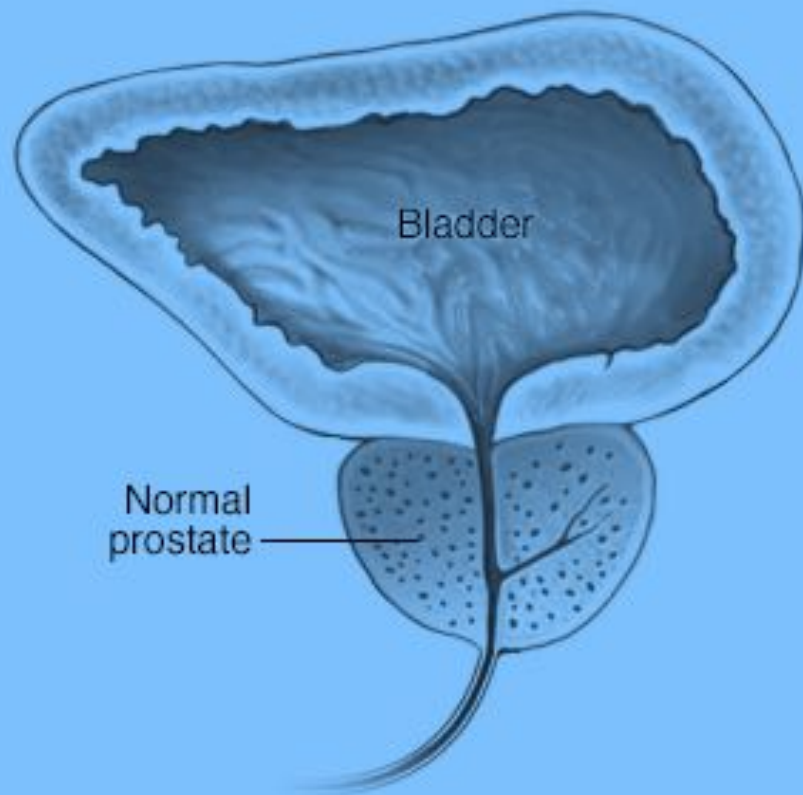


Hermaphroditus

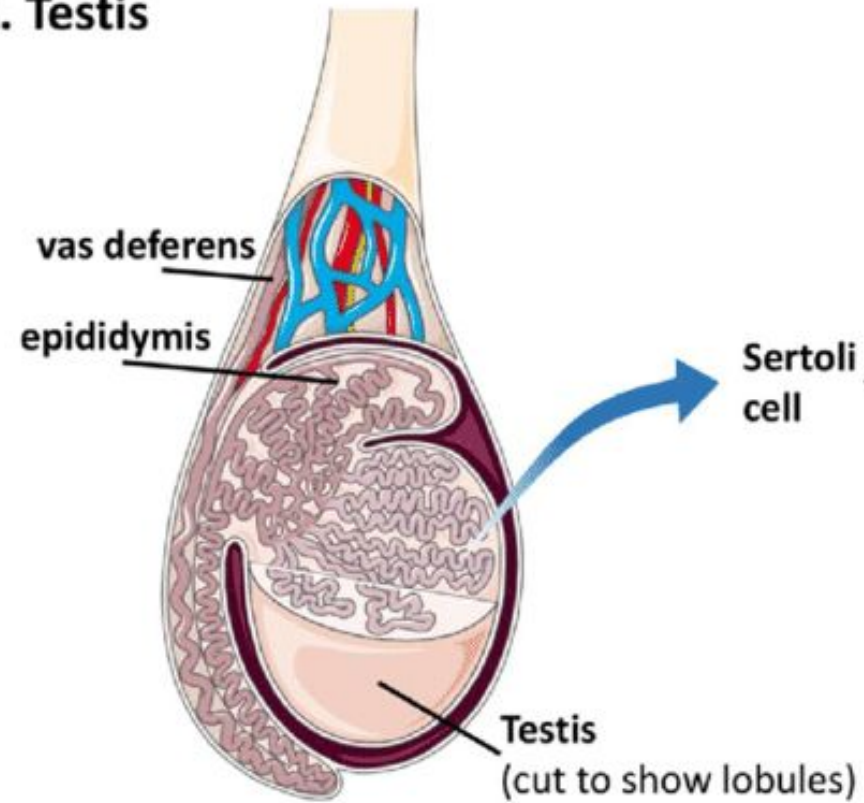
- ▶ IN GREEK MYTHOLOGY, HERMAPHRODITUS WAS THE SON OF HERMES, MESSENGER OF THE GODS, AND APHRODITE, THE GODDESS OF LOVE. HE WAS A HANDSOME YOUNG MAN. ONE DAY WHILE SWIMMING IN A WOODLAND POOL, ONE OF THE NAIADS, NYMPHS OF WELLS, SPRINGS AND PONDS, SPIED HIM AND INSTANTLY FELL IN LOVE WITH HIM. SHE SWAM OUT TO HIM, EMBRACED HIM PROFESSING HER LOVE. HE REJECTED HER ADVANCES. ANGRY AT BEING REJECTED, SHE PRAYED TO THE GODS THAT THEY NEVER BE SEPARATED AGAIN. THE ANCIENT GODS HAD A WHIMSICAL, SOMETIMES CRUEL, SENSE OF HUMOR AND BOUND THEIR BODIES INTO ONE, EVER INSEPARABLE. BE CAREFUL WHAT YOU ASK FOR? THE CURSE OF THE ANSWERED PRAYER?

- ▶ *IN CLASSIC ART, HERMAPHRODITUS IS PORTRAYED AS A WOMAN WITH MALE GENITALIA. TRUE HERMAPHRODITES EXIST, ALTHOUGH THEY ARE RARE, BUT MOST COMMONLY HAVE A MALE-TYPE BODY WITH AMBIGUOUS GENITALIA. INTERNALLY, BOTH OVARIAN AND TESTICULAR TISSUE ARE PRESENT EITHER AS SEPARATE ORGANS OR AN OVOTESTIS. RELATED SEX STRUCTURES ARE POORLY DEVELOPED OR ABSENT.*

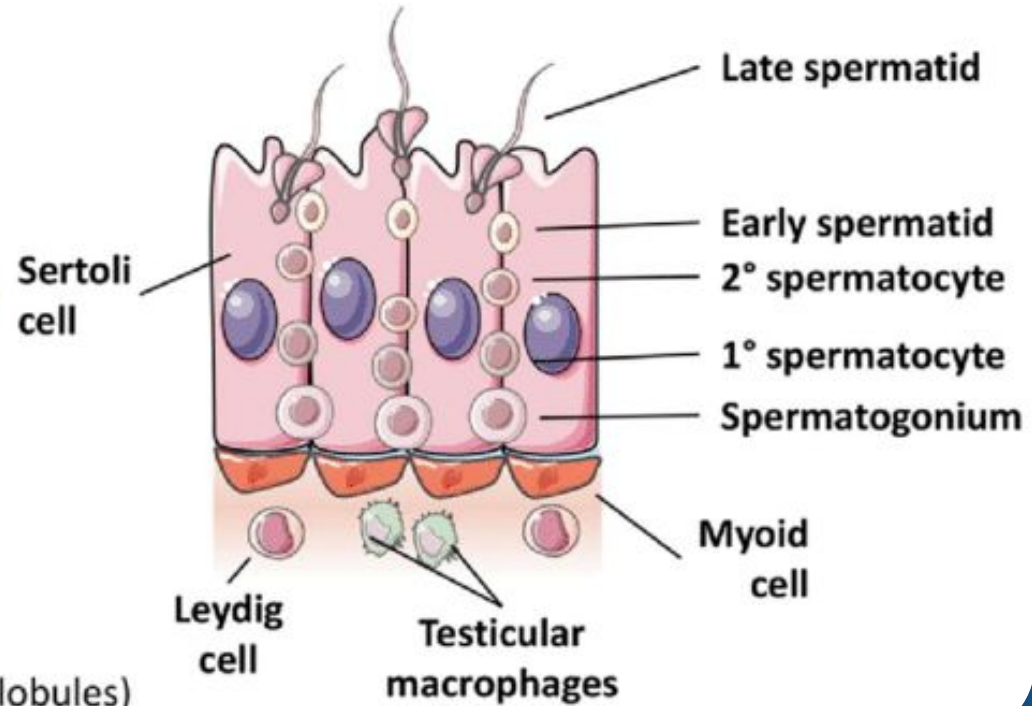




A. Testis

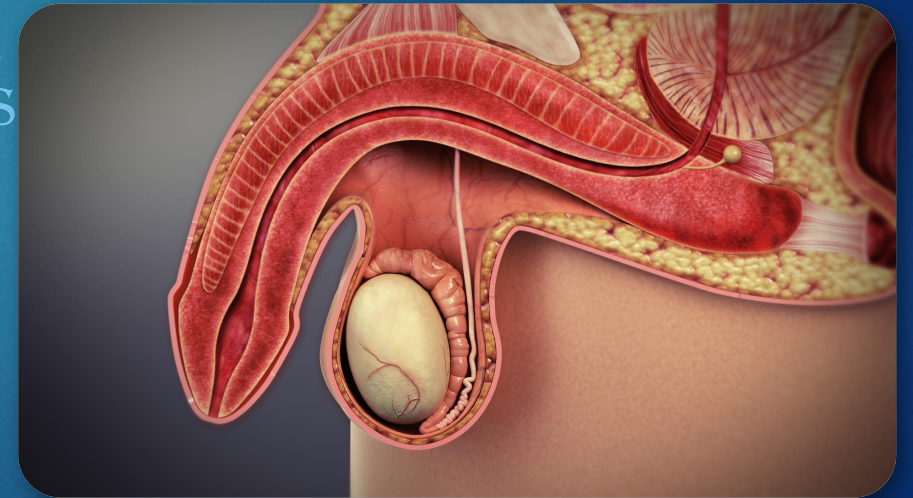


B. Blood-Testis Barrier



Erectile dysfunction

- ▶ **ERECTILE DYSFUNCTION (ED)**, ALSO KNOWN AS **IMPOTENCE**, IS A TYPE OF **SEXUAL DYSFUNCTION** CHARACTERIZED BY THE INABILITY TO DEVELOP OR MAINTAIN AN **ERECTION** OF THE **PENIS** DURING **SEXUAL ACTIVITY**. ED CAN HAVE PSYCHOLOGICAL CONSEQUENCES AS IT CAN BE TIED TO RELATIONSHIP DIFFICULTIES AND **SELF-IMAGE**.
- ▶ A PHYSICAL CAUSE CAN BE IDENTIFIED IN ABOUT 80% OF CASES.^[1] THESE INCLUDE **CARDIOVASCULAR DISEASE**, **DIABETES MELLITUS**, NEUROLOGICAL PROBLEMS SUCH AS FOLLOWING **PROSTATECTOMY**, **HYPOGONADISM**, AND **DRUG SIDE EFFECTS**. **PSYCHOLOGICAL** IMPOTENCE IS WHERE ERECTION OR PENETRATION FAILS DUE TO THOUGHTS OR FEELINGS; THIS IS SOMEWHAT LESS FREQUENT, ON THE ORDER OF ABOUT 10% OF CASES.^[1] IN PSYCHOLOGICAL IMPOTENCE, THERE IS A STRONG **RESPONSE TO PLACEBO TREATMENT**. THE TERM **ERECTILE DYSFUNCTION** IS NOT USED FOR OTHER DISORDERS OF ERECTION, SUCH AS **PRIAPISM**.



FOR BETTER UNDERSTANDING



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❖ [HTTPS://UROLOGY.WEILLCORNELL.ORG/MALE-REPRODUCTIVE-MEDICINE](https://urology.weillcornell.org/male-reproductive-medicine)

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THANK
YOU

