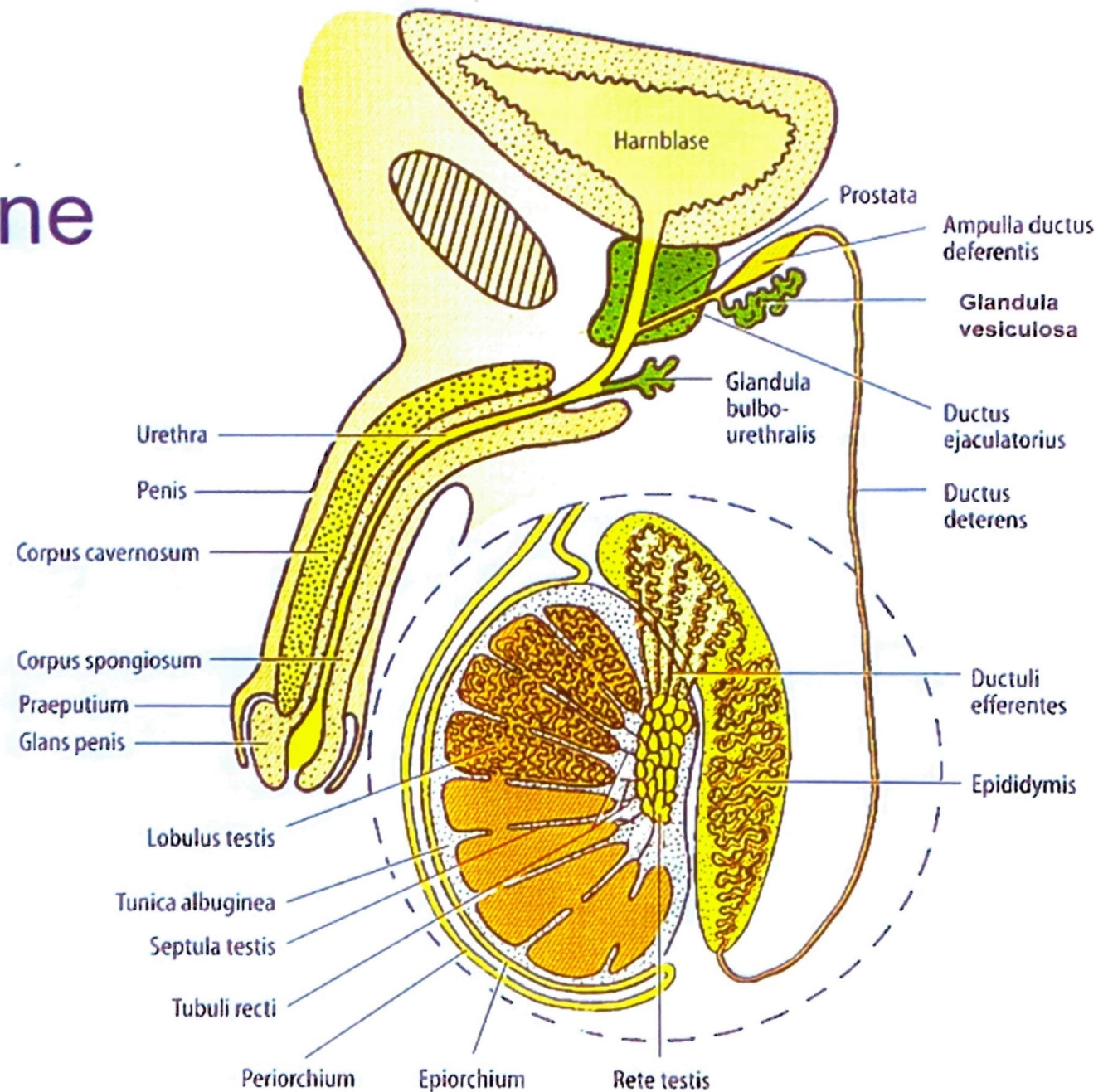
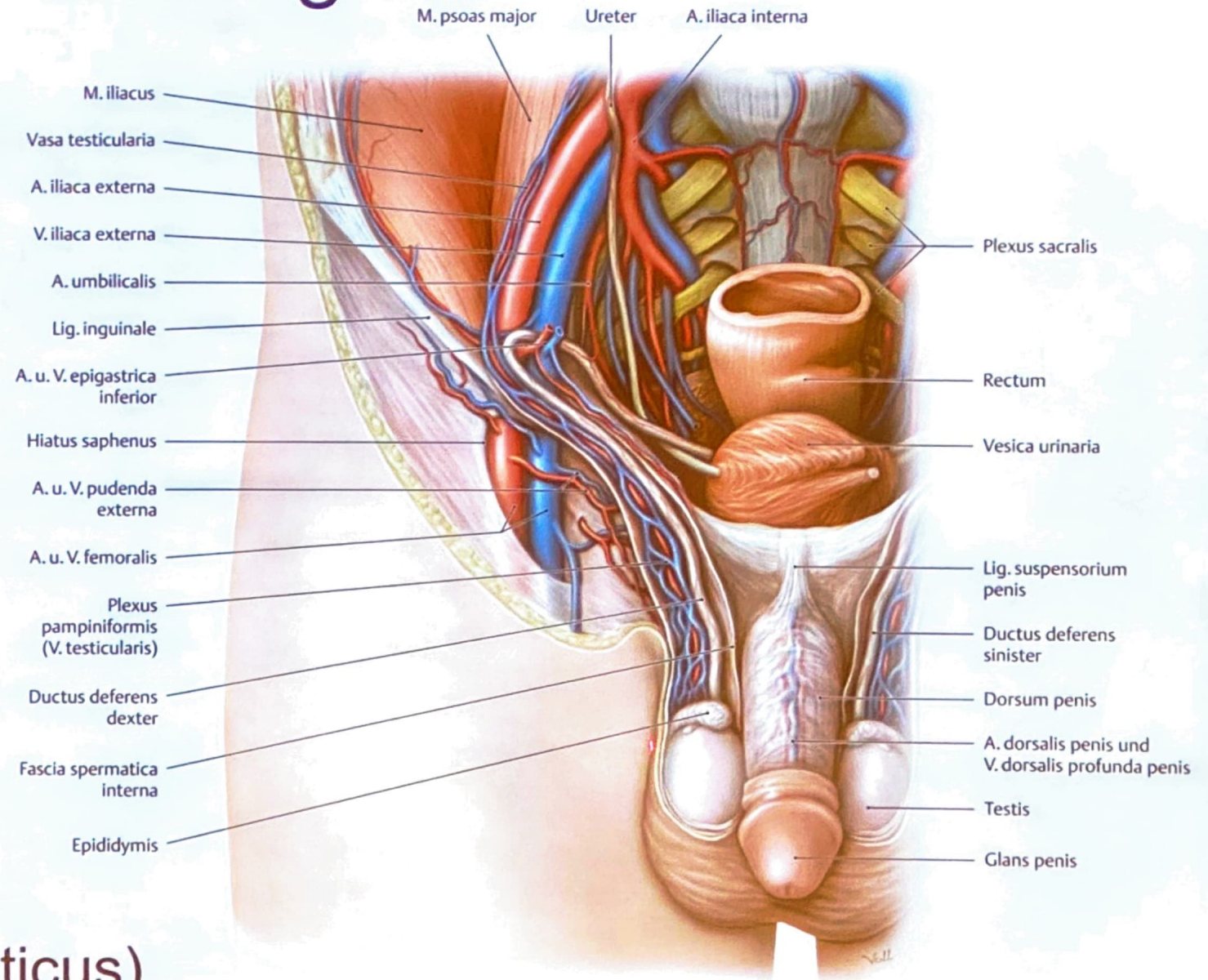


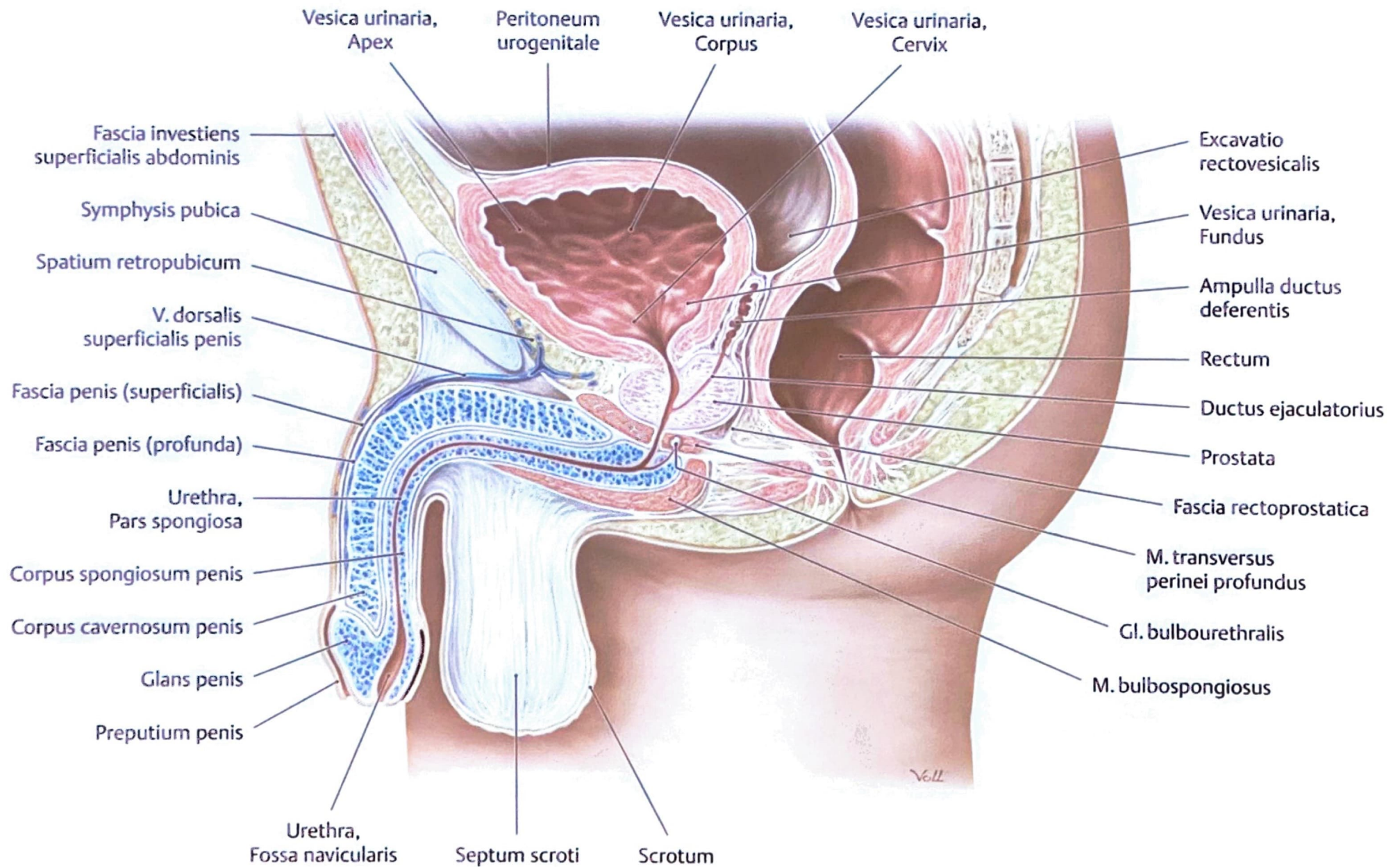
Männliche Genitalorgane



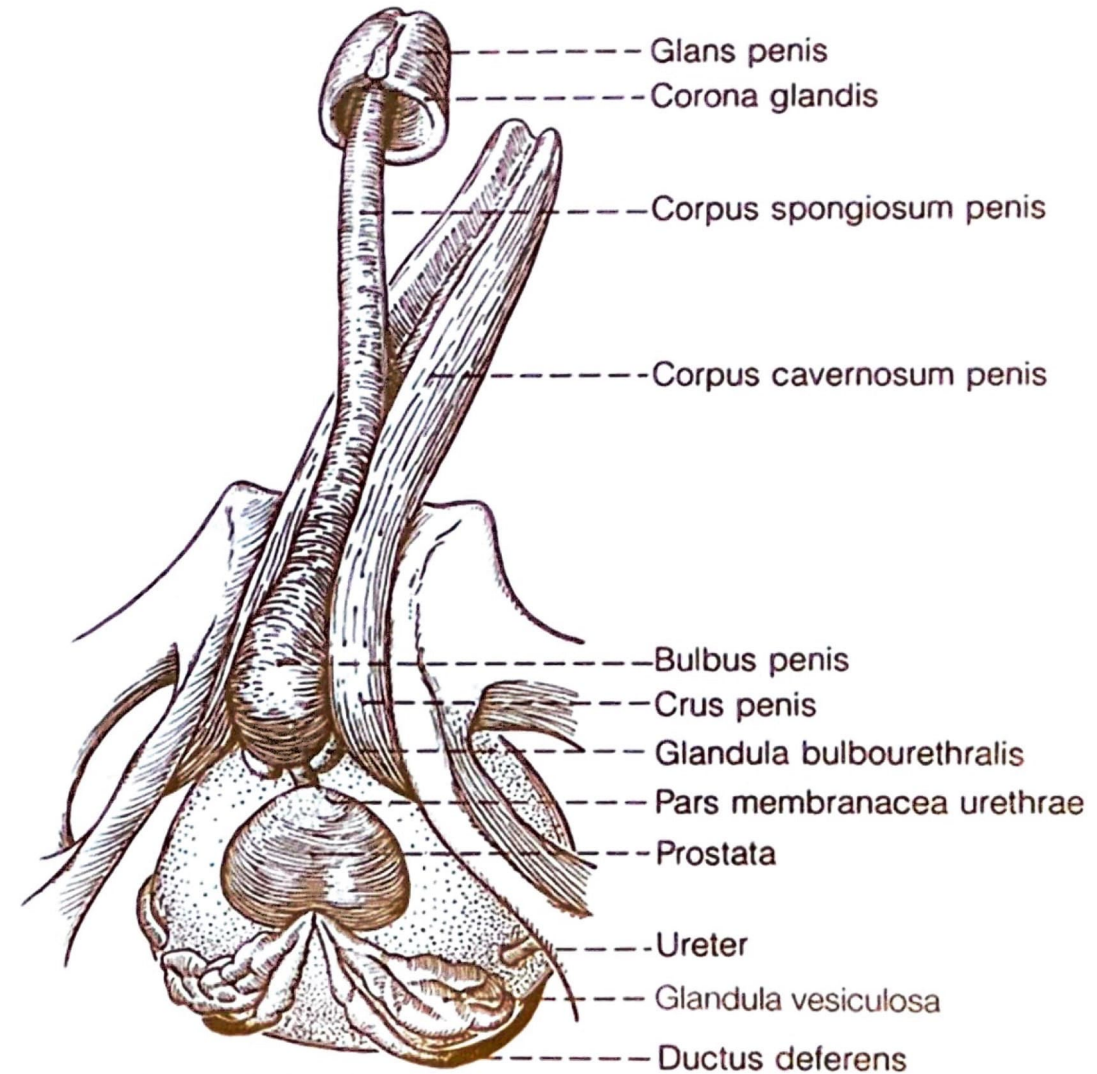
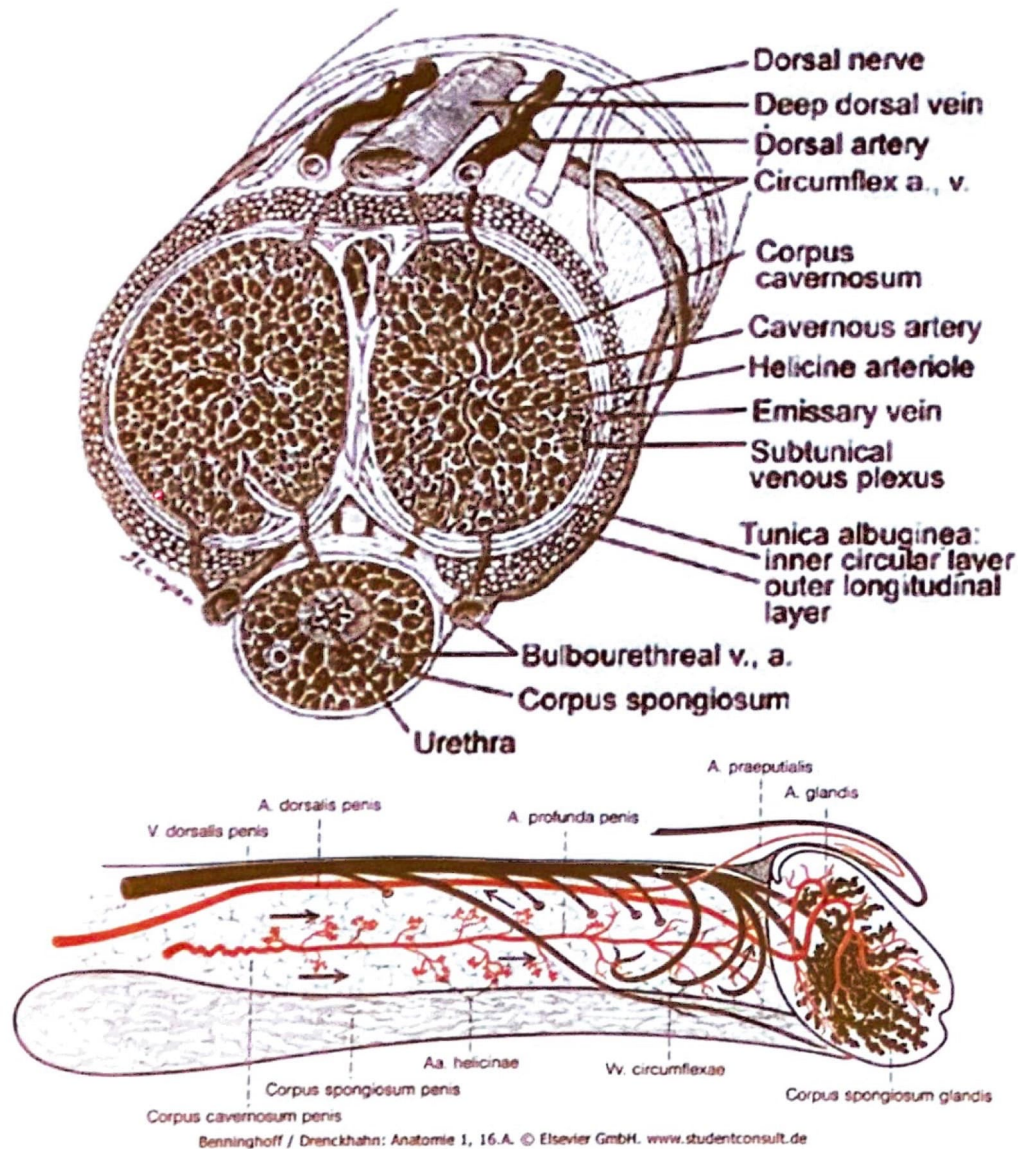
Männliche Genitalorgane



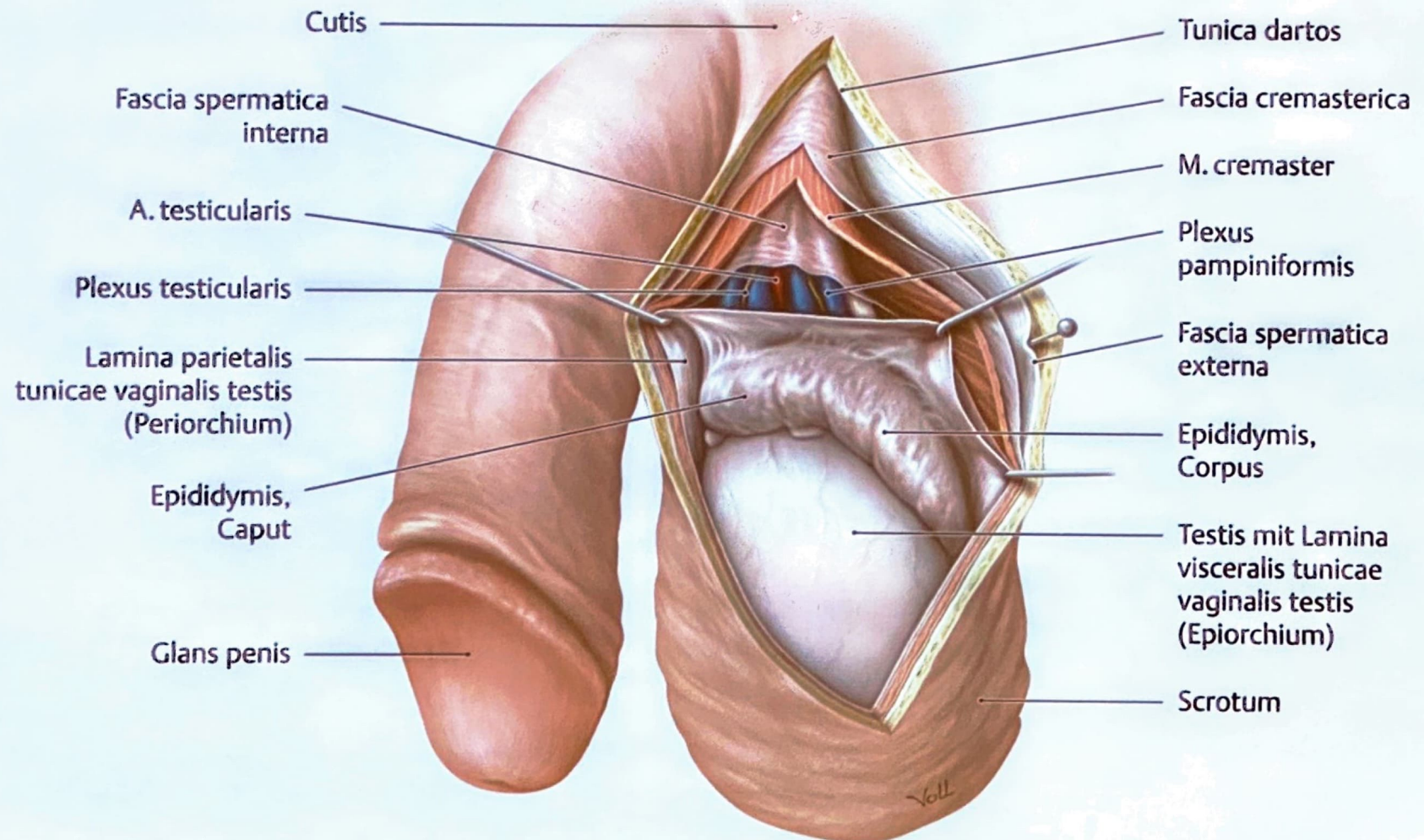
Samenstrang
(Funiculus spermaticus)



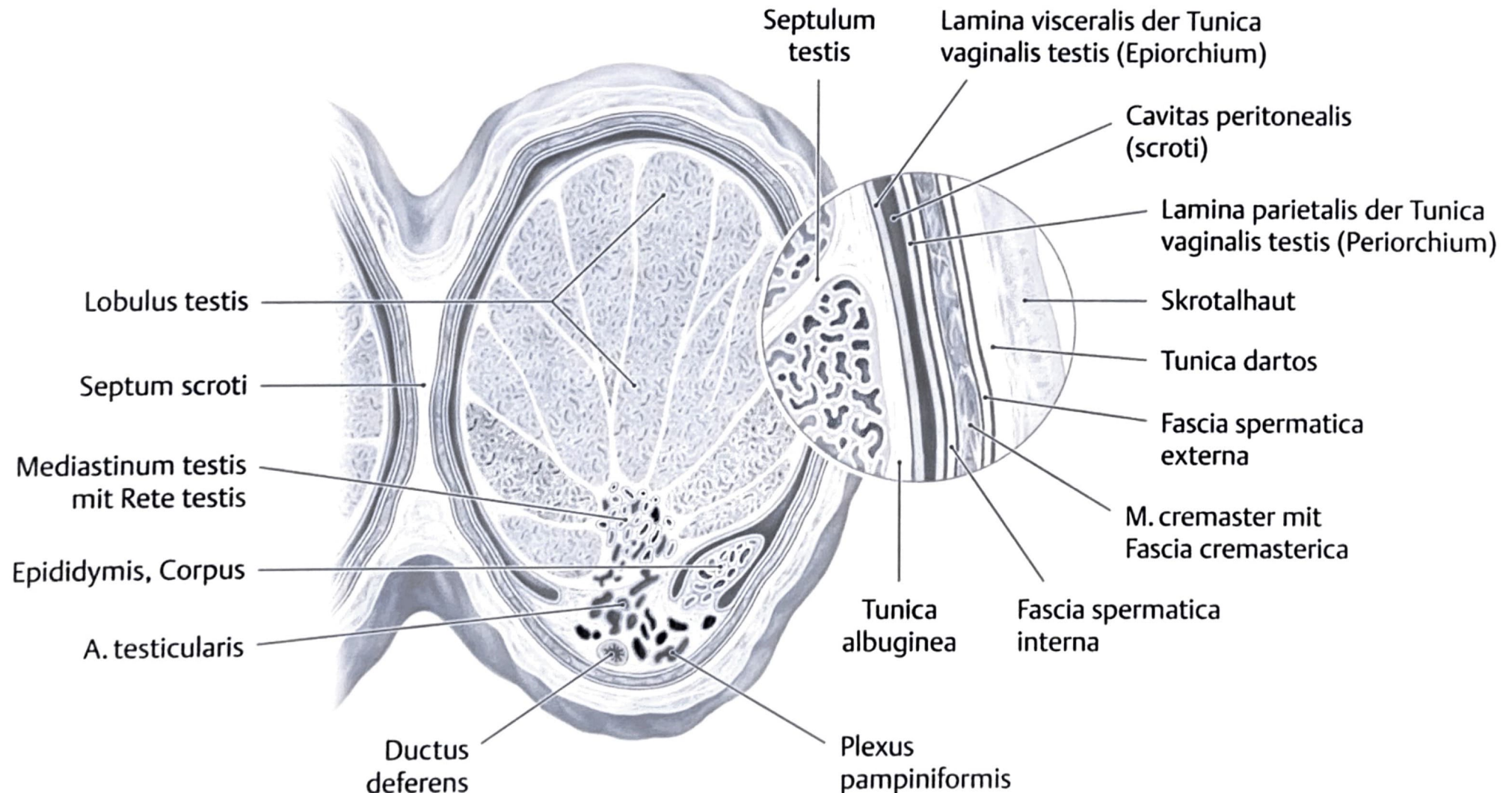
Schwellkörper



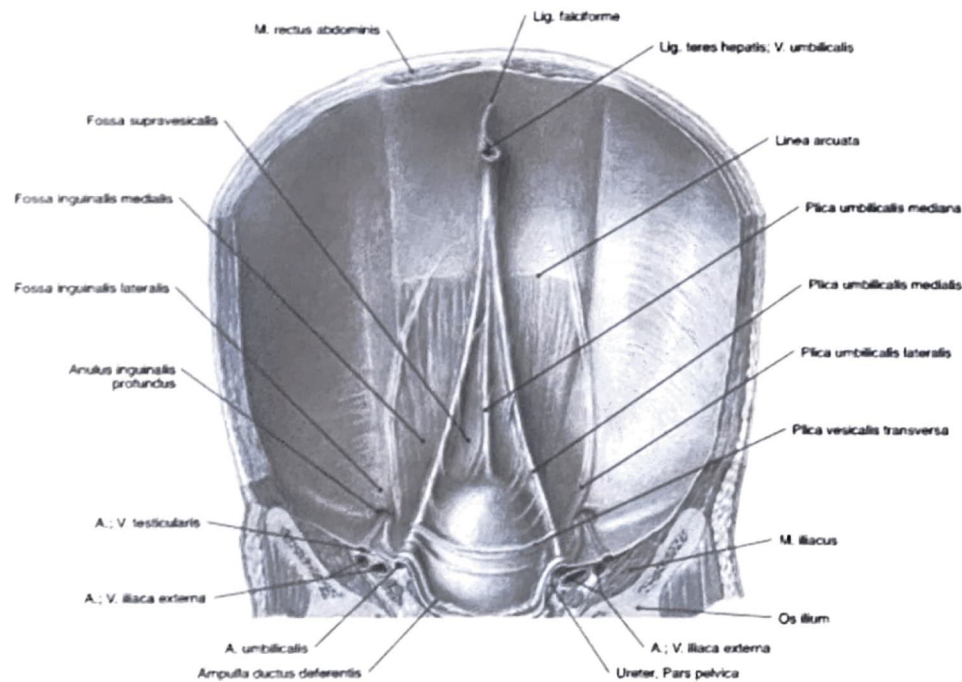
Hodensack (Scrotum) und Hodenhüllen



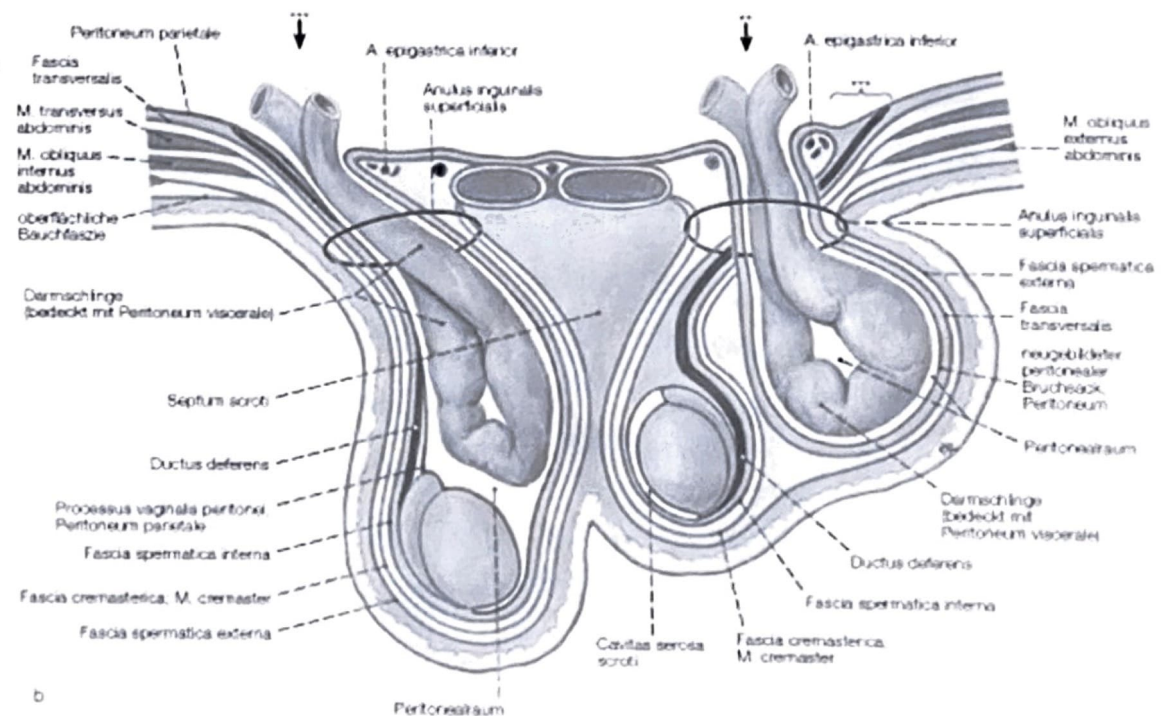
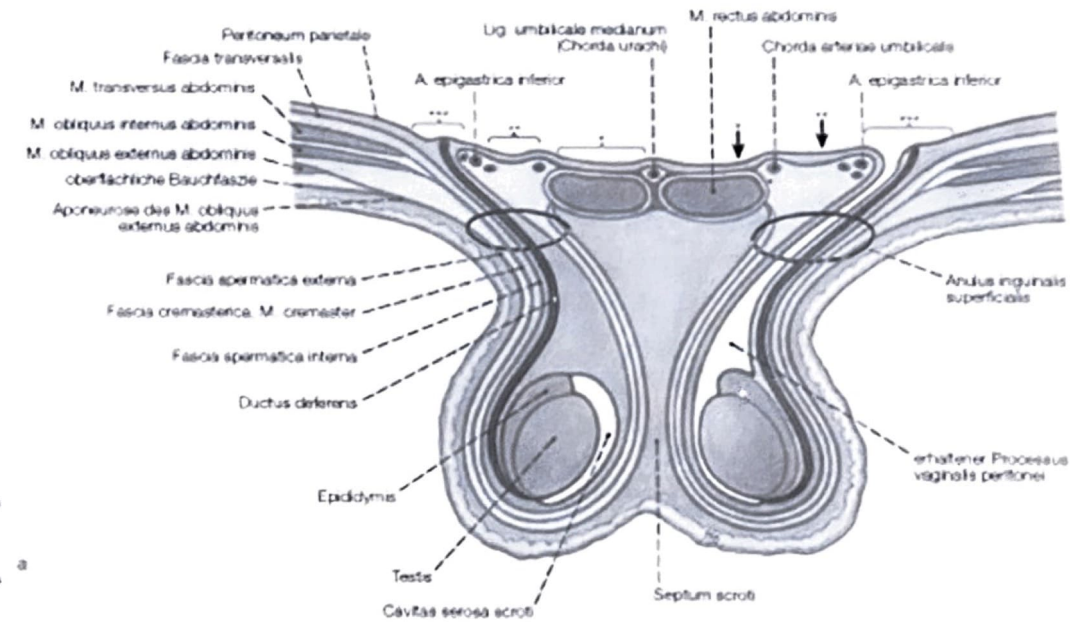
Hodensack (Scrotum) und Hodenhüllen



Leistenbruch



Putz / Pabst: Sobotta Atlas der Anatomie 2, 22.A. © Elsevier GmbH. www.studentconsult.de



Benninghoff / Drenckhahn: Anatomie 1, 16.A. © Elsevier GmbH. www.studentconsult.de



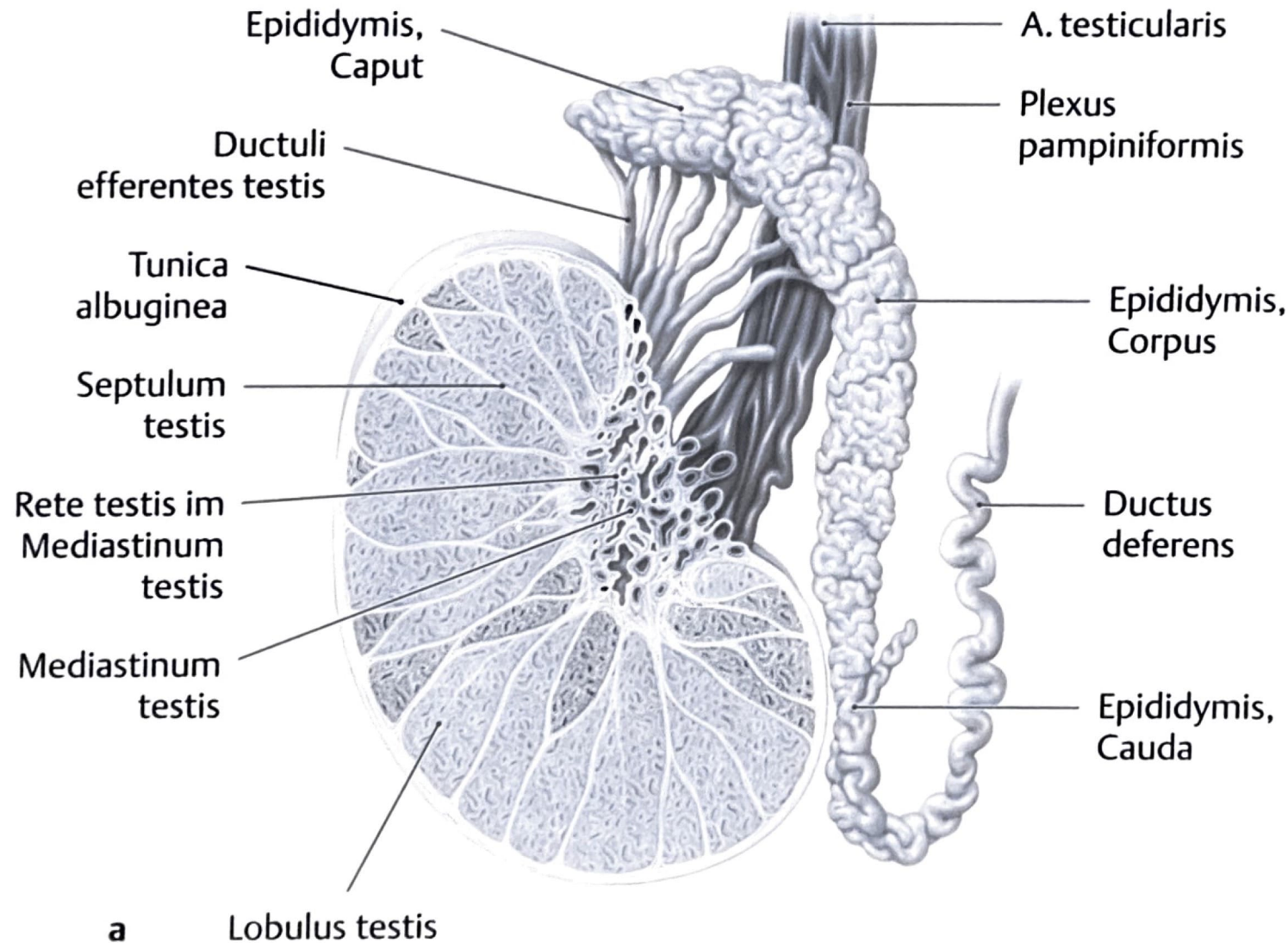
Hoden (Testis)

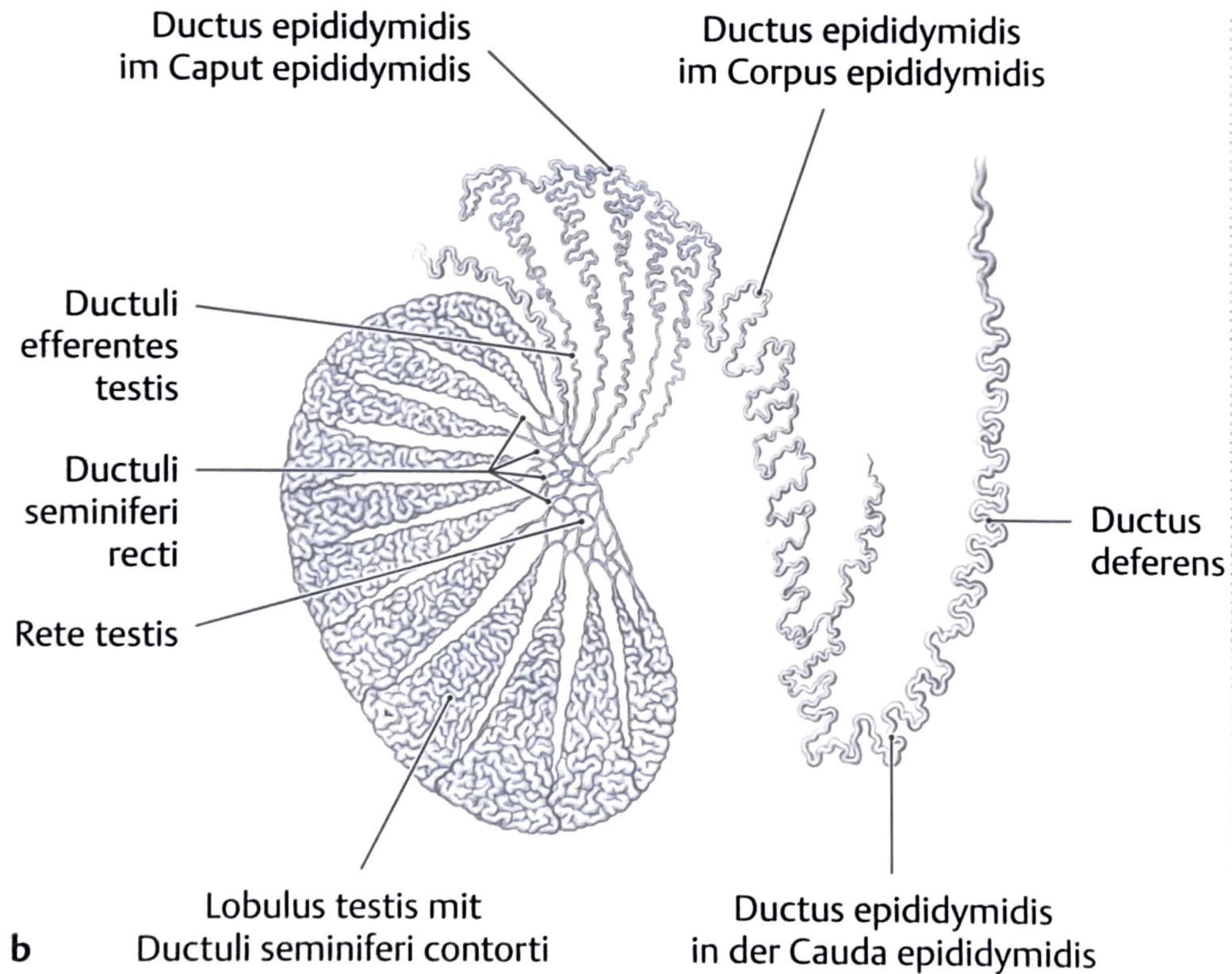
Volumen: 20-25 ml

Gewicht: 20-30 g

männlich

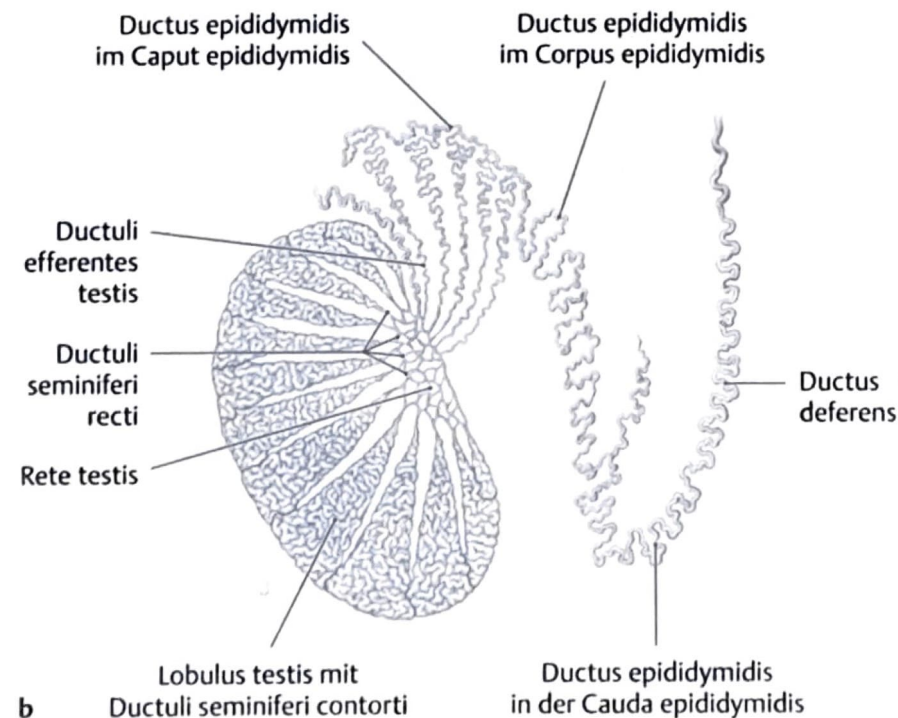
Aufbau von Hoden und Nebenhoden





Hoden

- Tunica albuginea
- 370 pyramidenförmige Läppchen (Lobuli testis)
- 1-4 stark geknäulte Hodenkanälchen (Ductuli seminiferi) pro Läppchen:



Männliche Genitalorgane

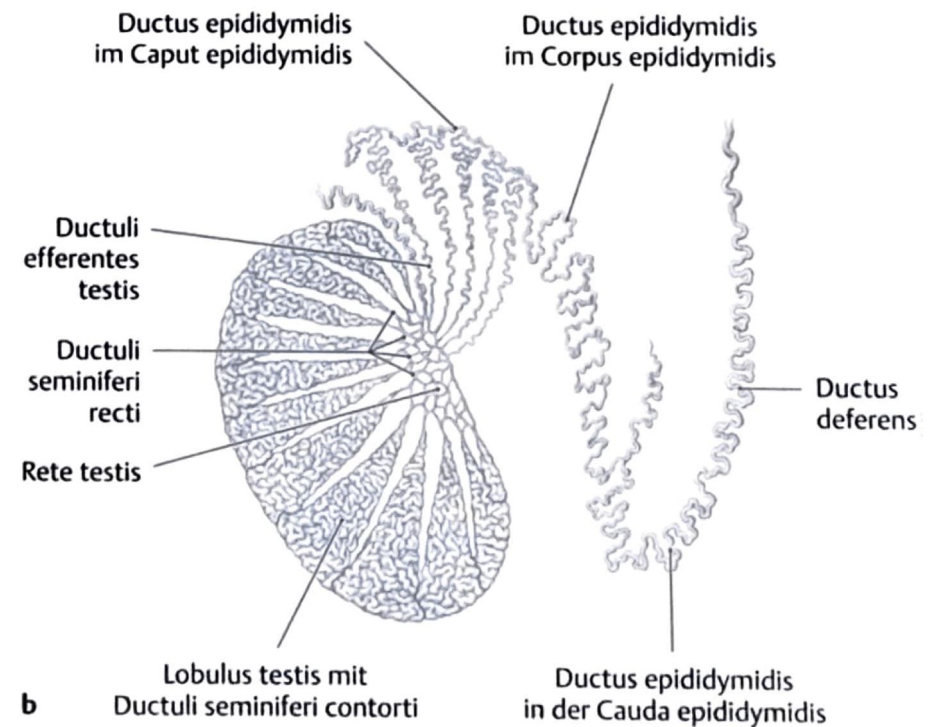
Hodenkanälchen (Ductuli seminiferi) →

Rete testis →

Ductuli efferentes →

Ductus epididymidis →

Ductus deferens



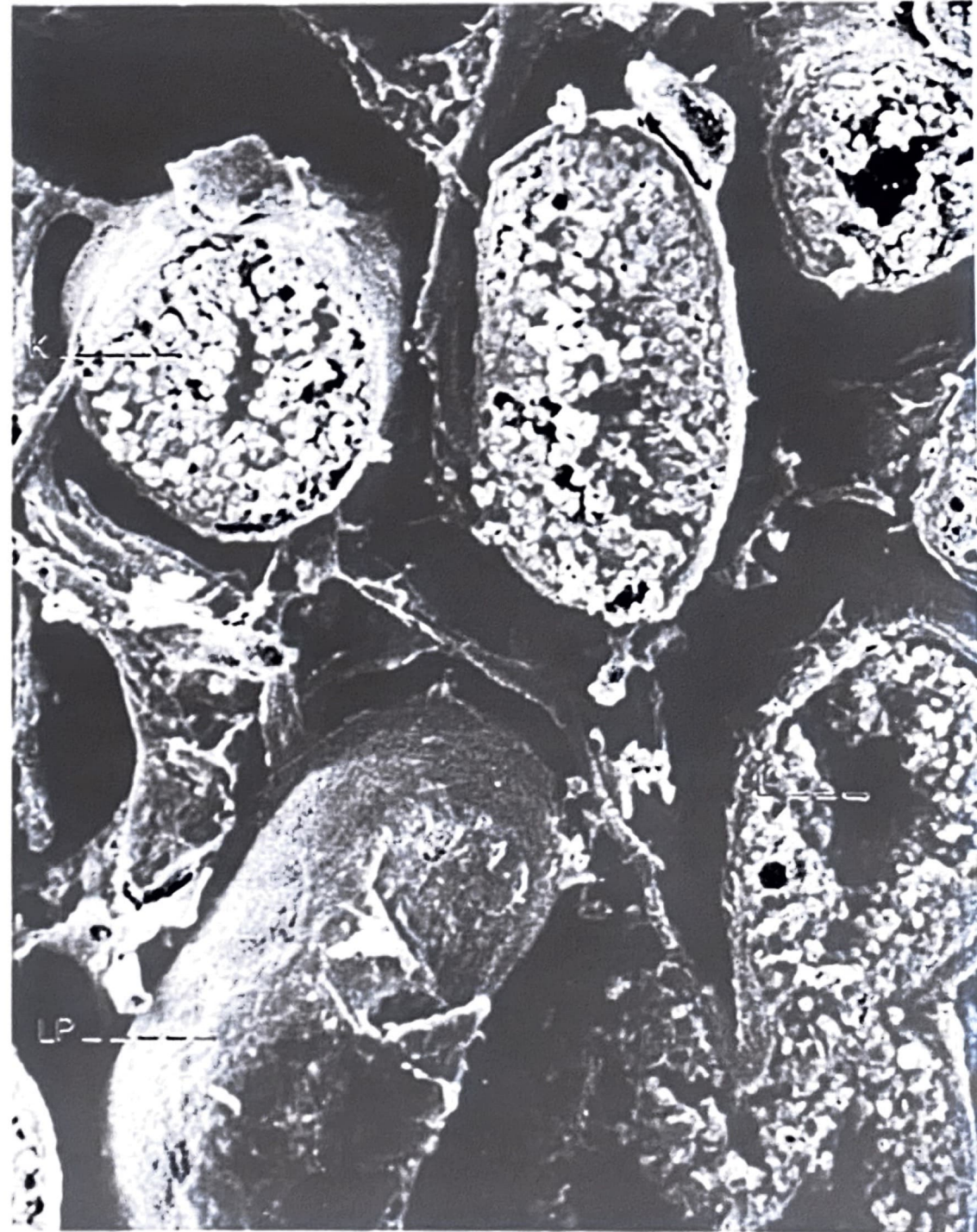
Tubuli seminiferi

Durchmesser: 180-280 μm

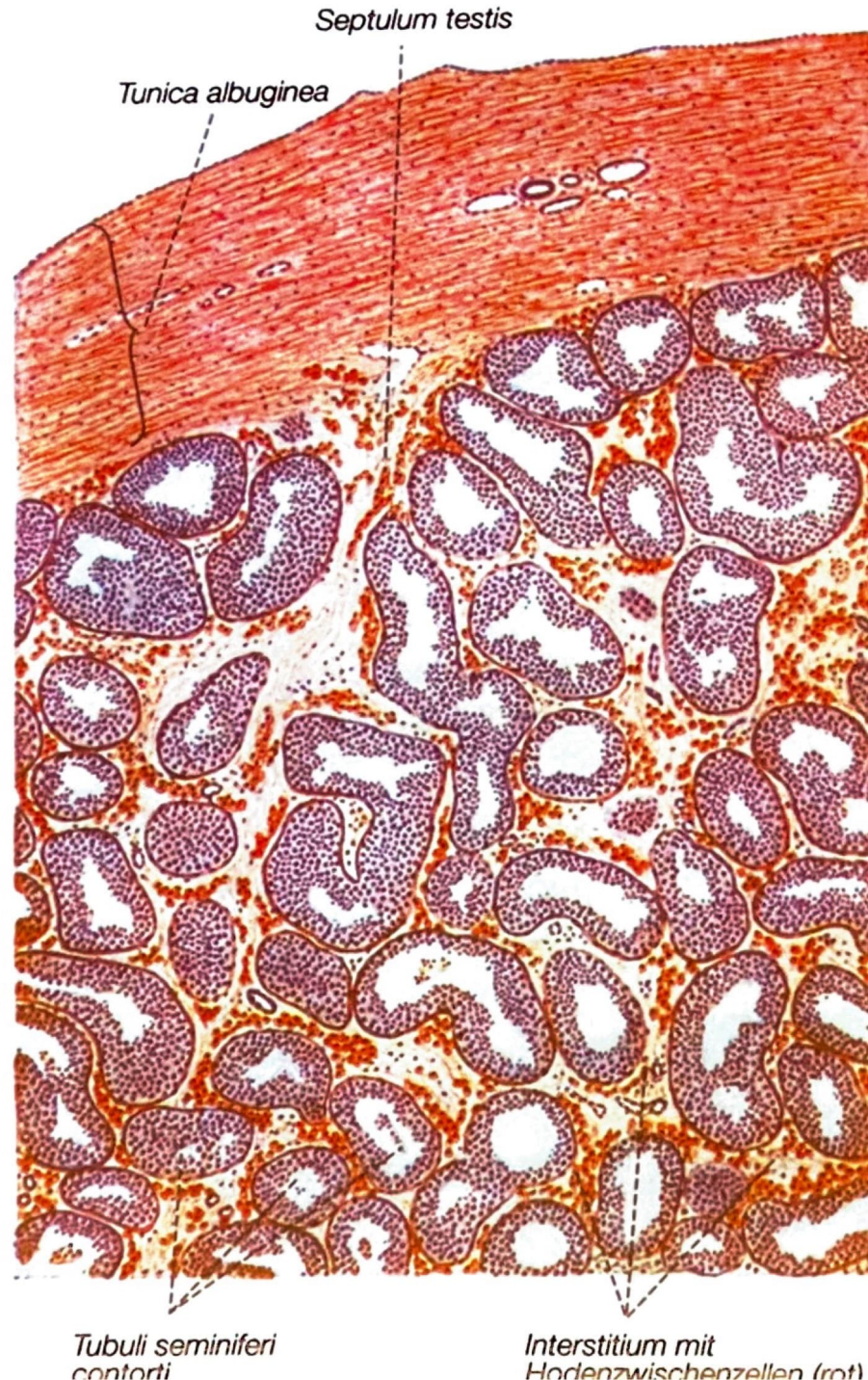
Ein Ductulus: 20 cm lang

Länge komplett: 300-350 m

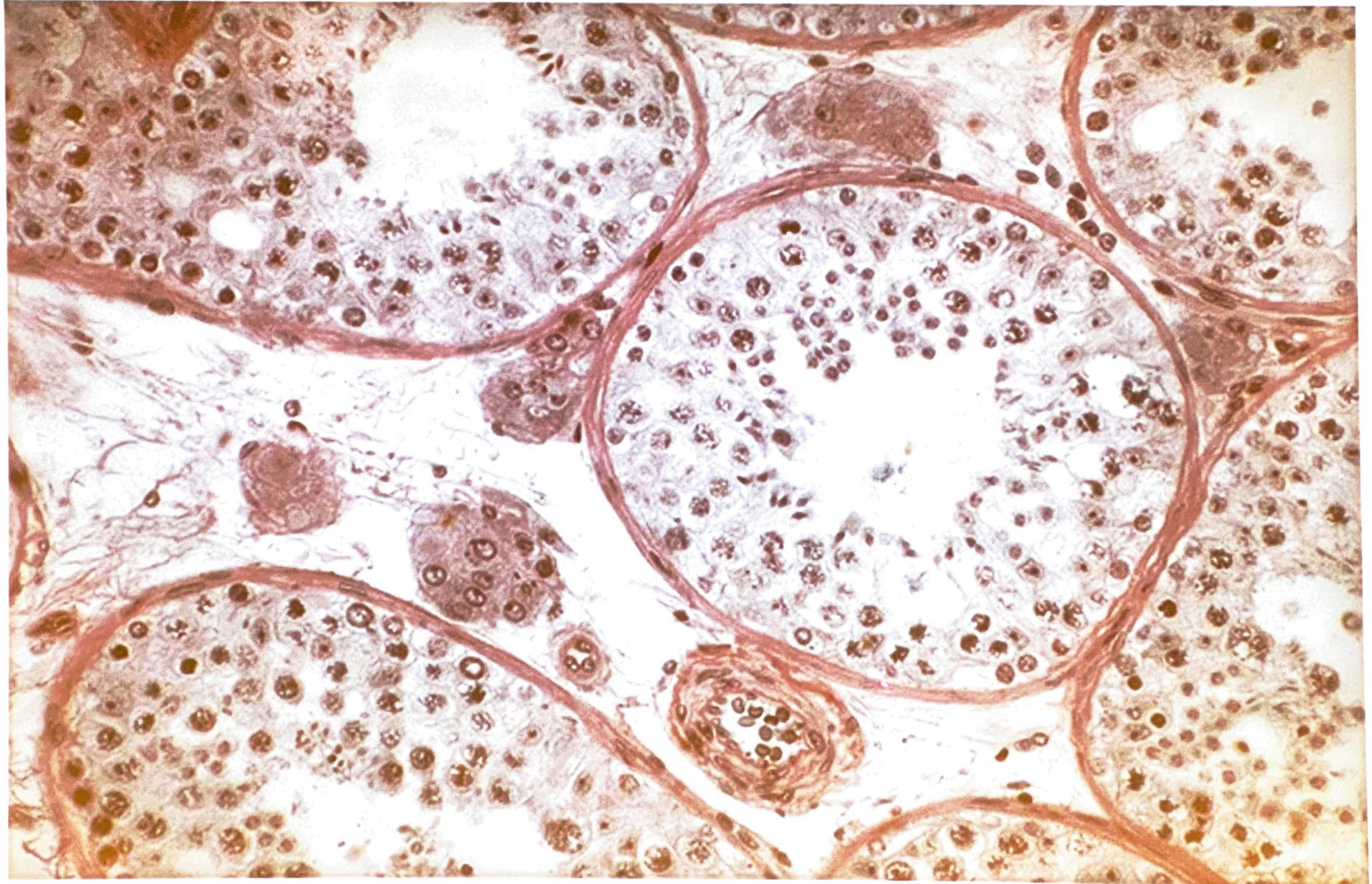
Ca. 1500 Mündungen in das Rete testis



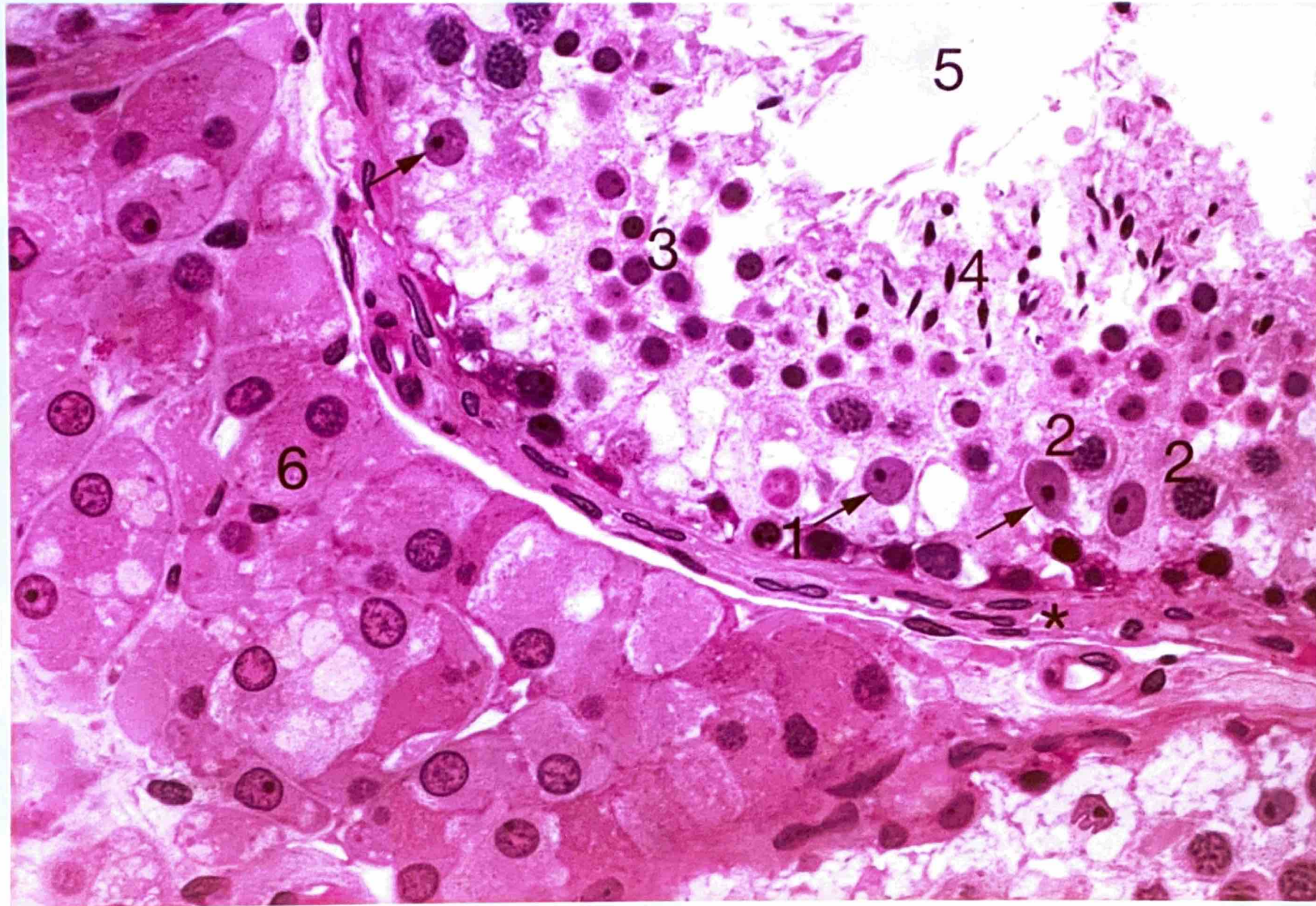
Hoden



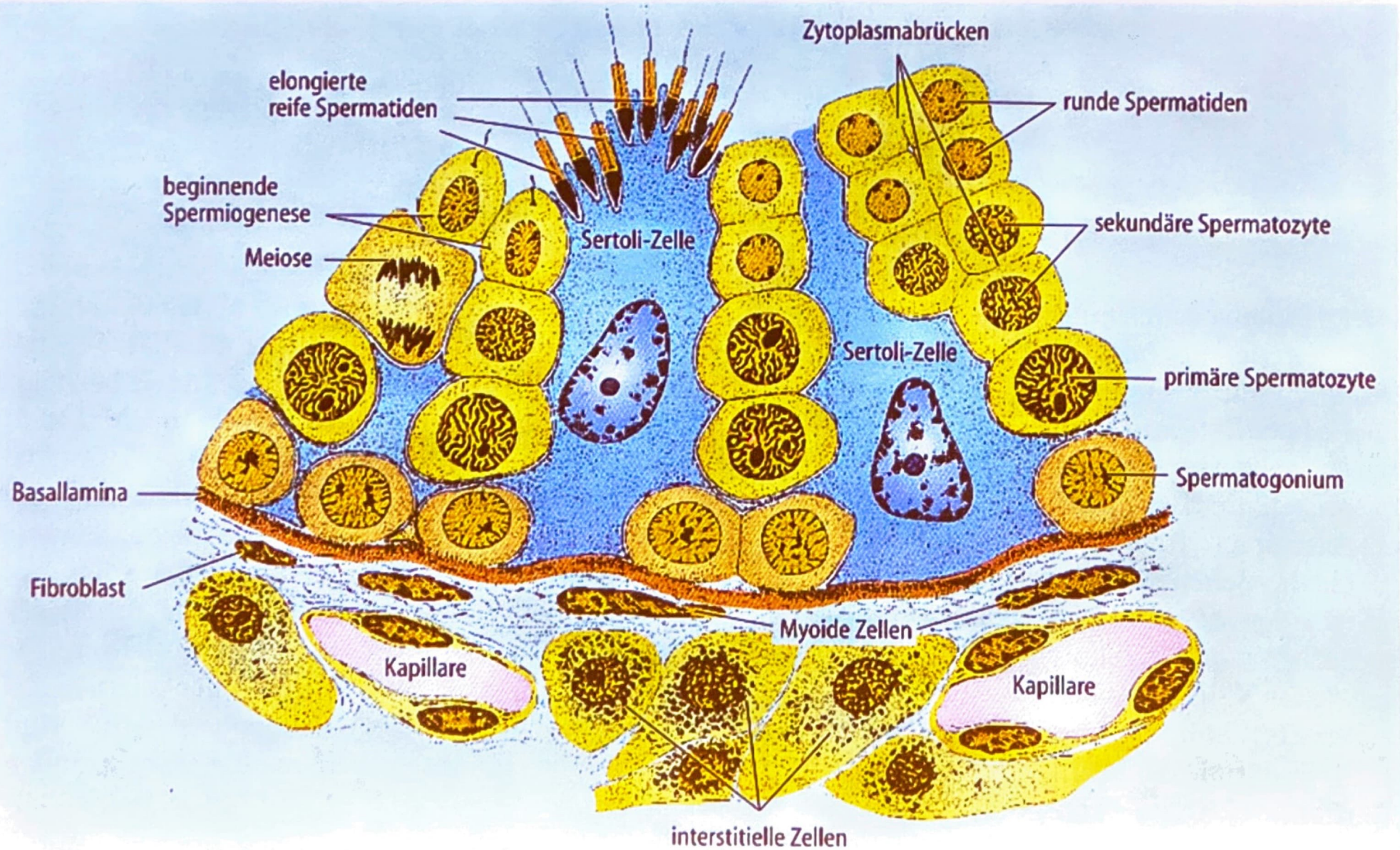
Tubuli seminiferi



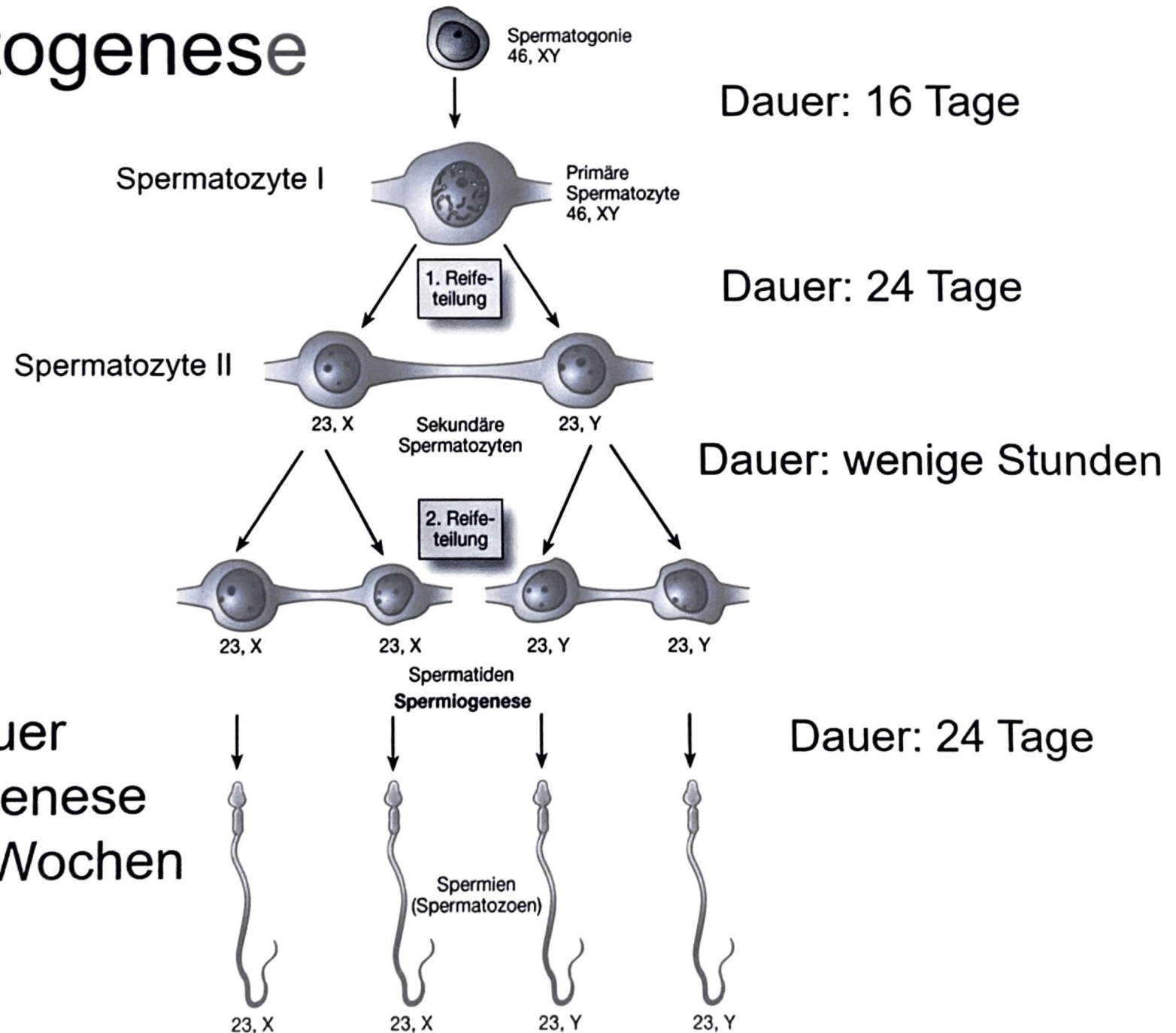
Keimepithel



Keimepithel

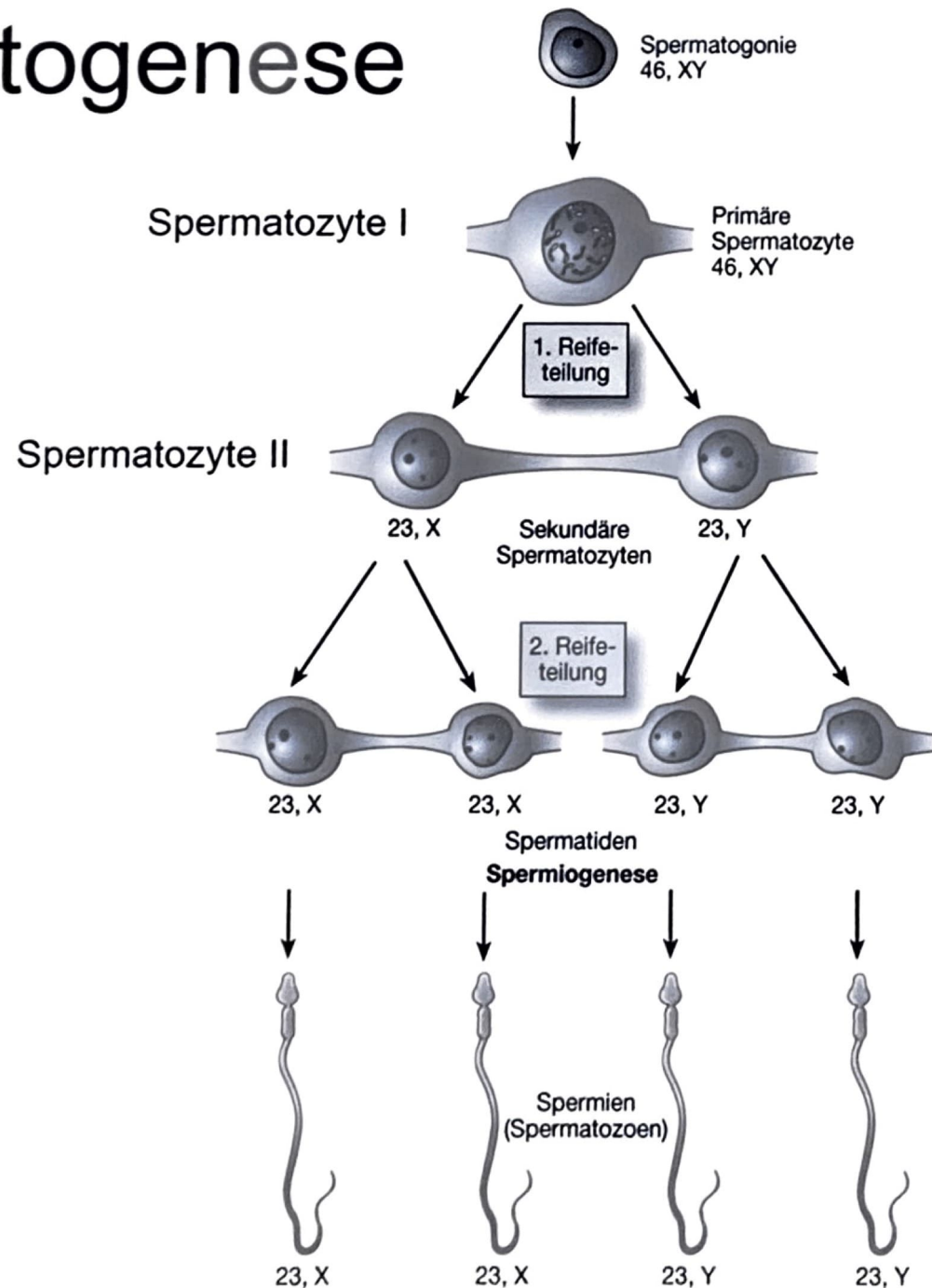


Spermatogenese



Die Gesamtdauer der Spermatogenese beträgt ca. 10 Wochen

Spermatogenese



diploid $2n$ $2c$

diploid $2n$ $4c$

haploid $1n$ $2c$

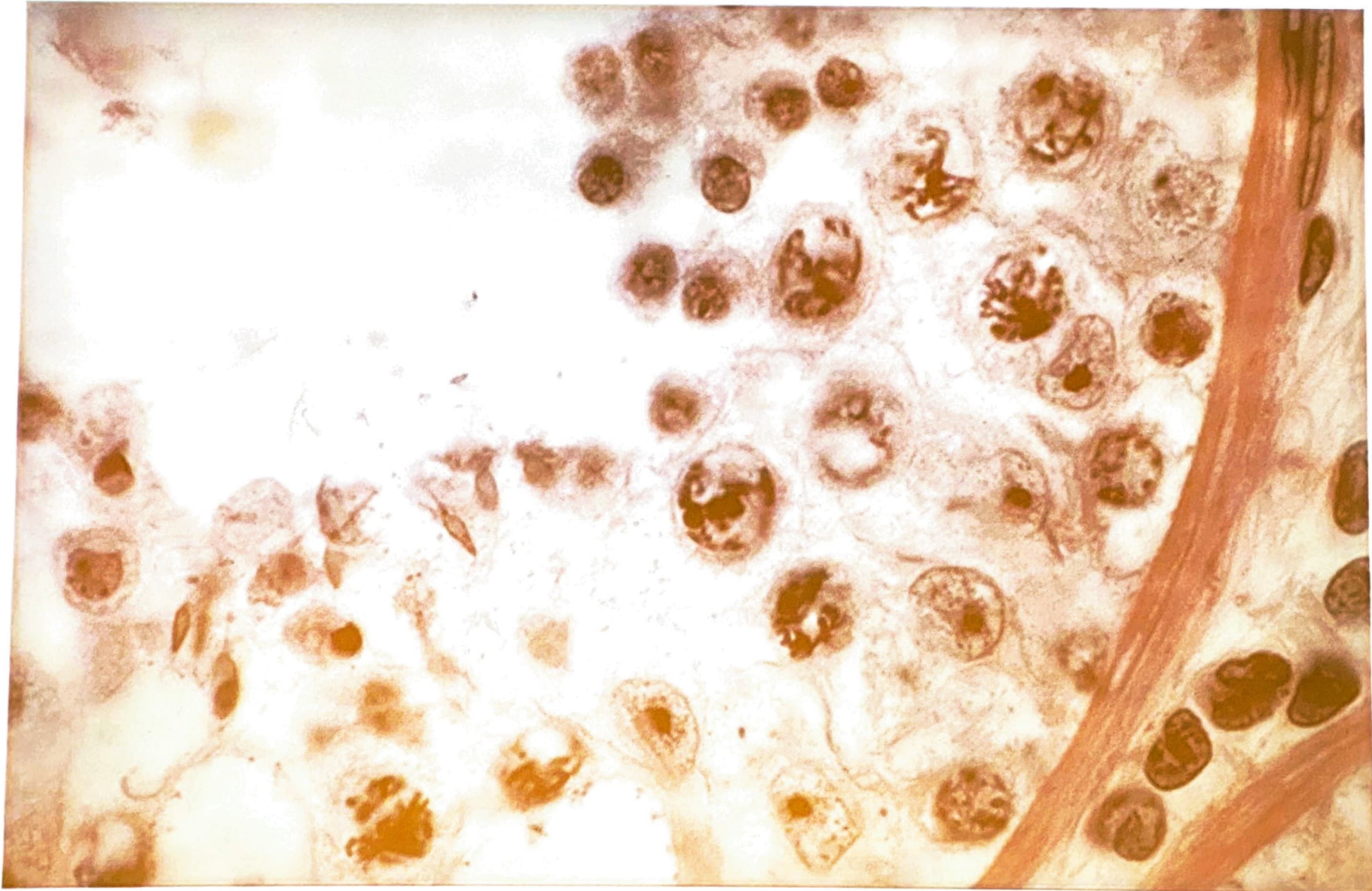
haploid $1n$ $1c$

haploid $1n$ $1c$

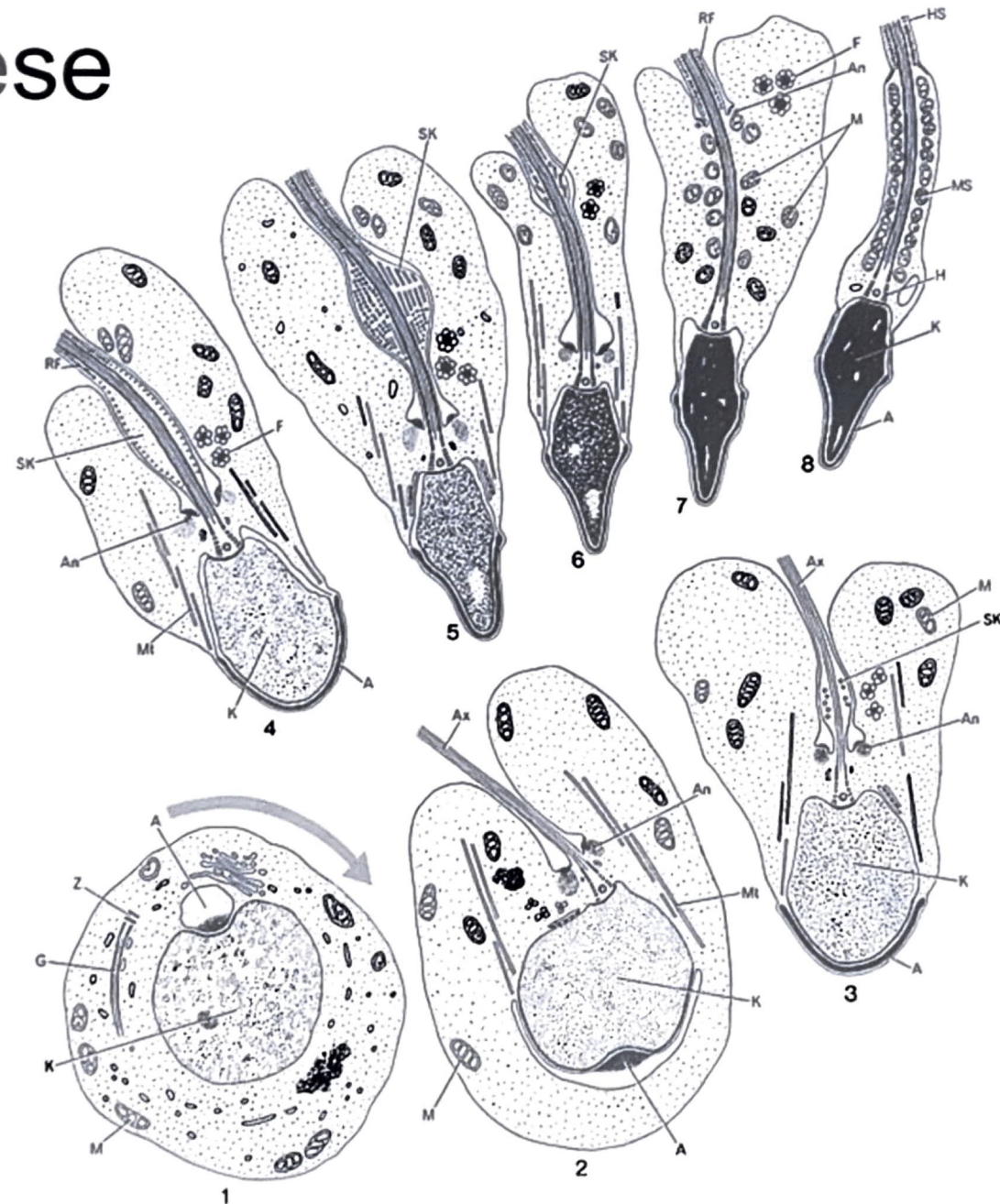
Sertoli-Zellen

- Stützfunktion
- Ernährungsfunktion (Ammenzellen)
- Reifungsfunktion der Keimzellen
- Phagozytosefunktion
- Bildung der Bluthodenschranke
- Bildung der Peptidhormone Inhibin und Aktivin
- Bildung des Anti-Müllerhormons in der Embryogenese

Identifikation der Zellen des Keimepithels



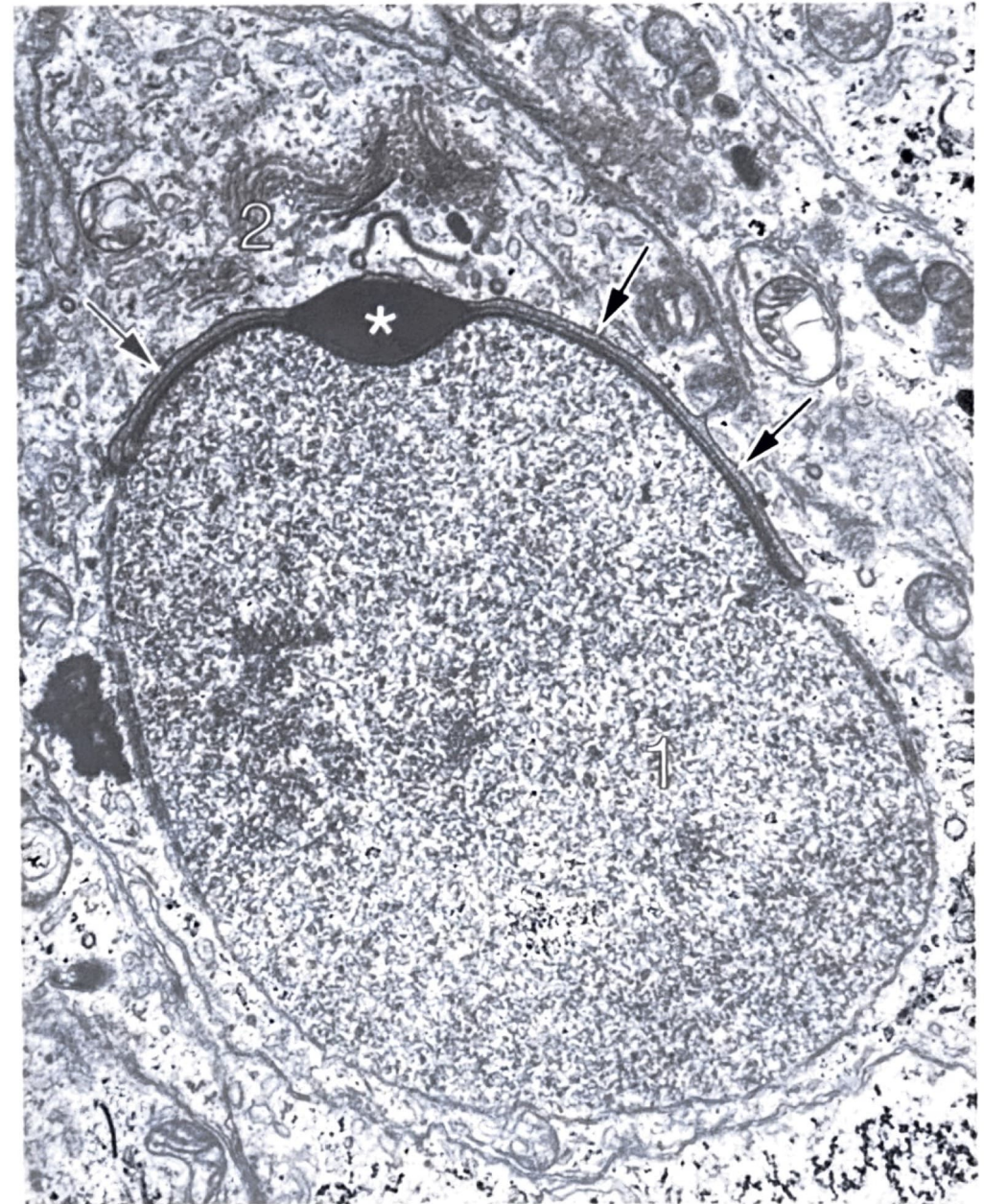
Spermiogenese



Spermatide

frühes

Entwicklungsstadium

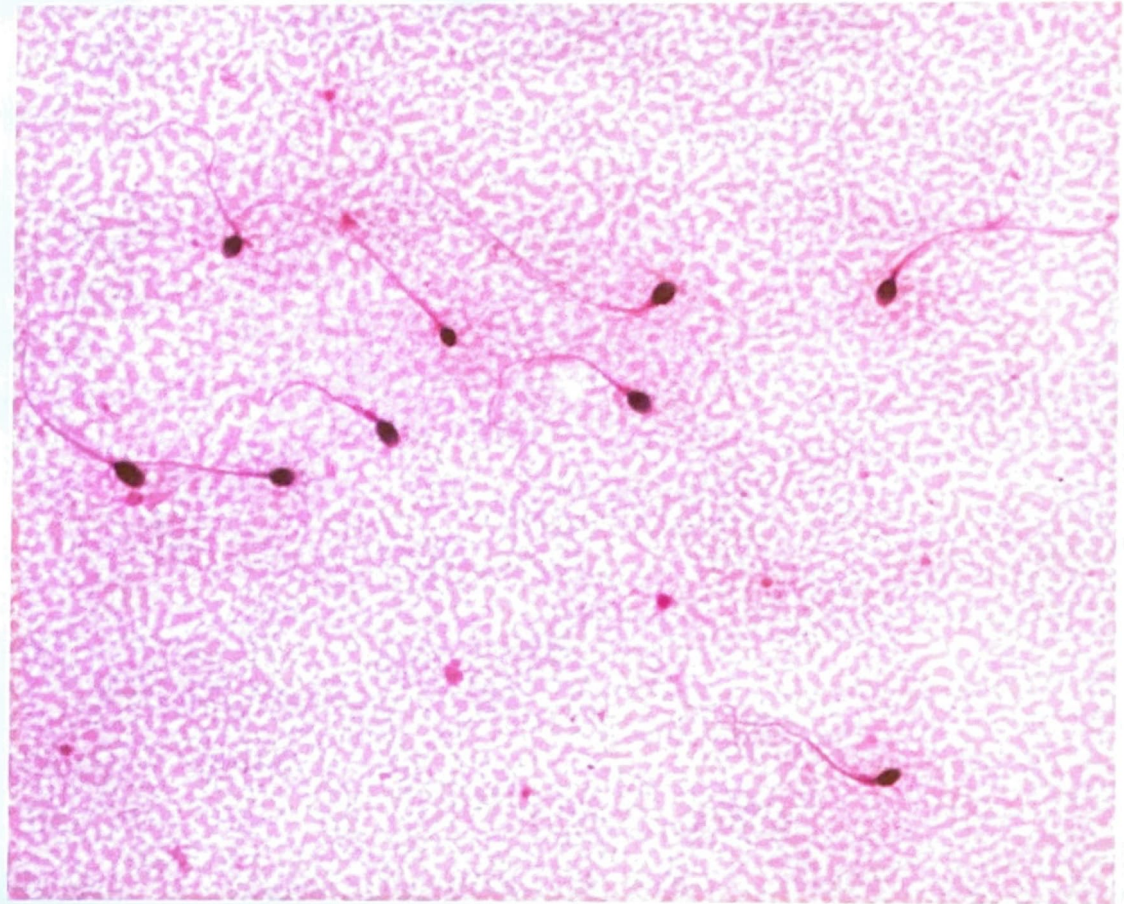


Spermatiden

spätes
Entwicklungsstadium



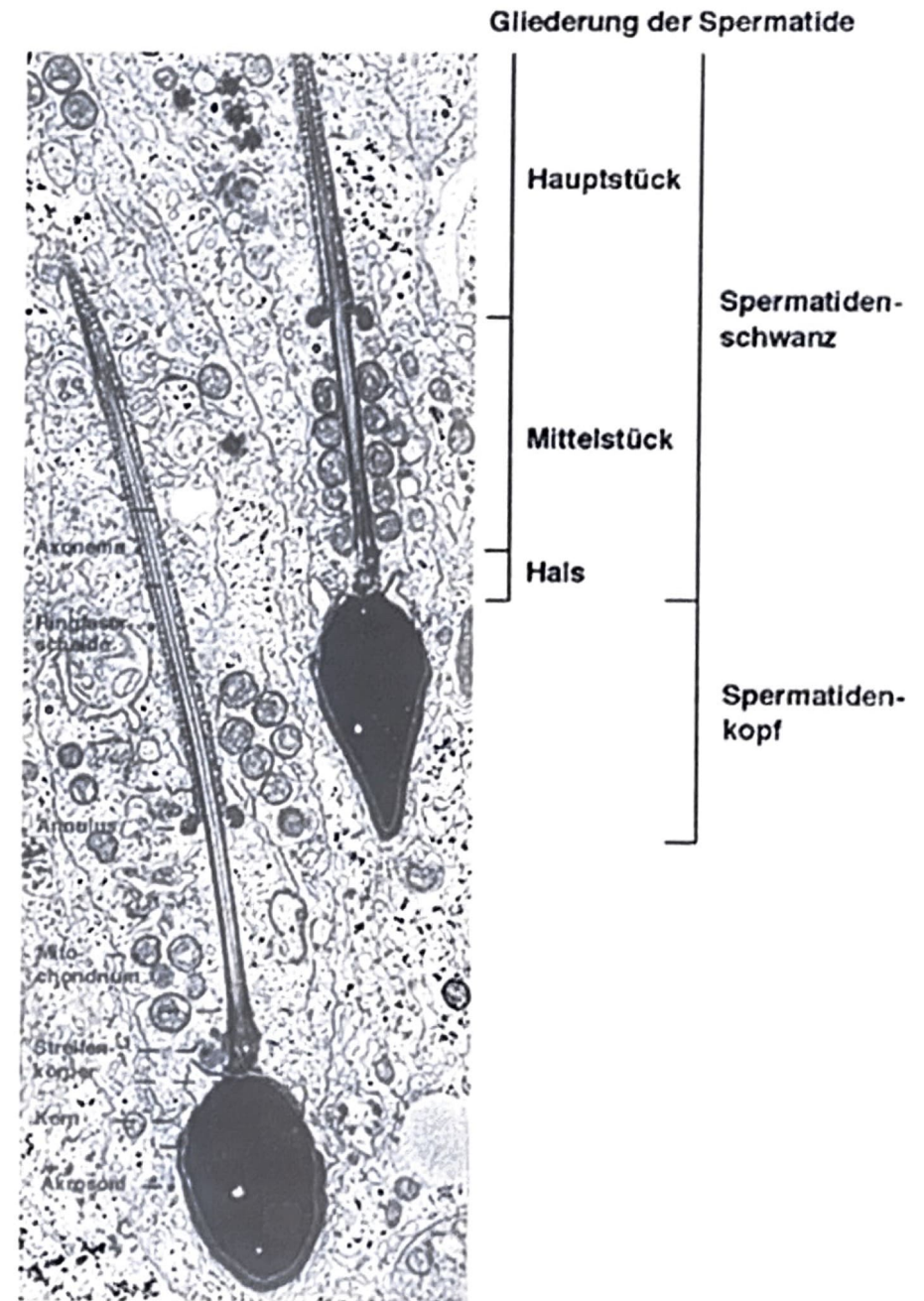
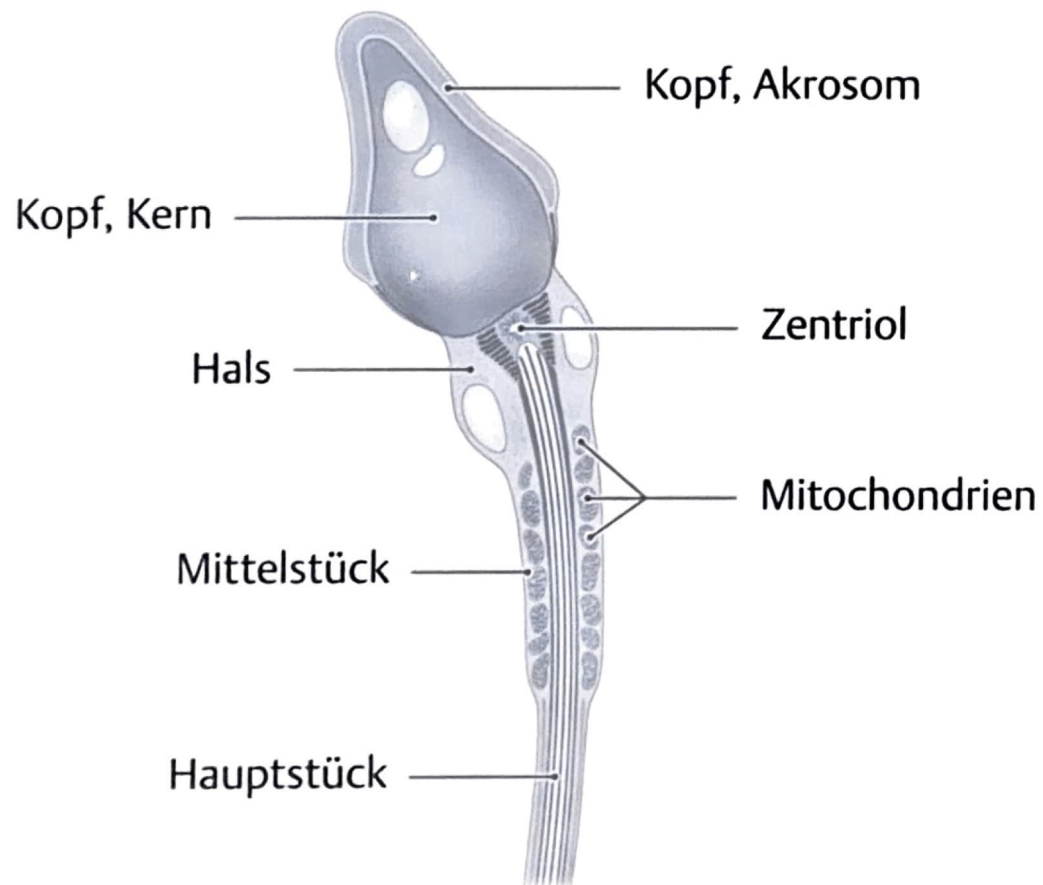
Spermatozoen



Ejakulat

200-300 Millionen Spermatozoen in 4 ml

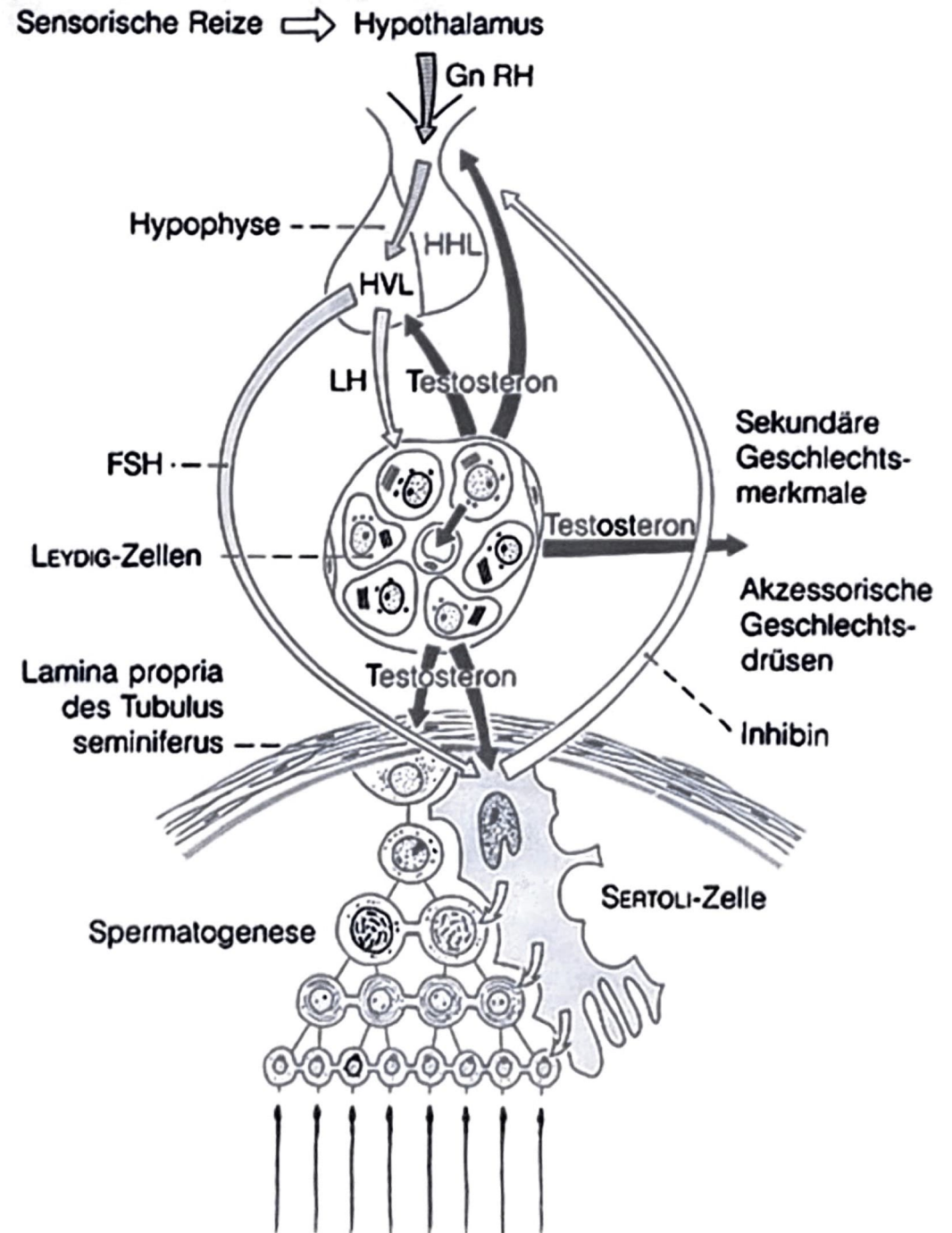
Spermien Spermatozoen



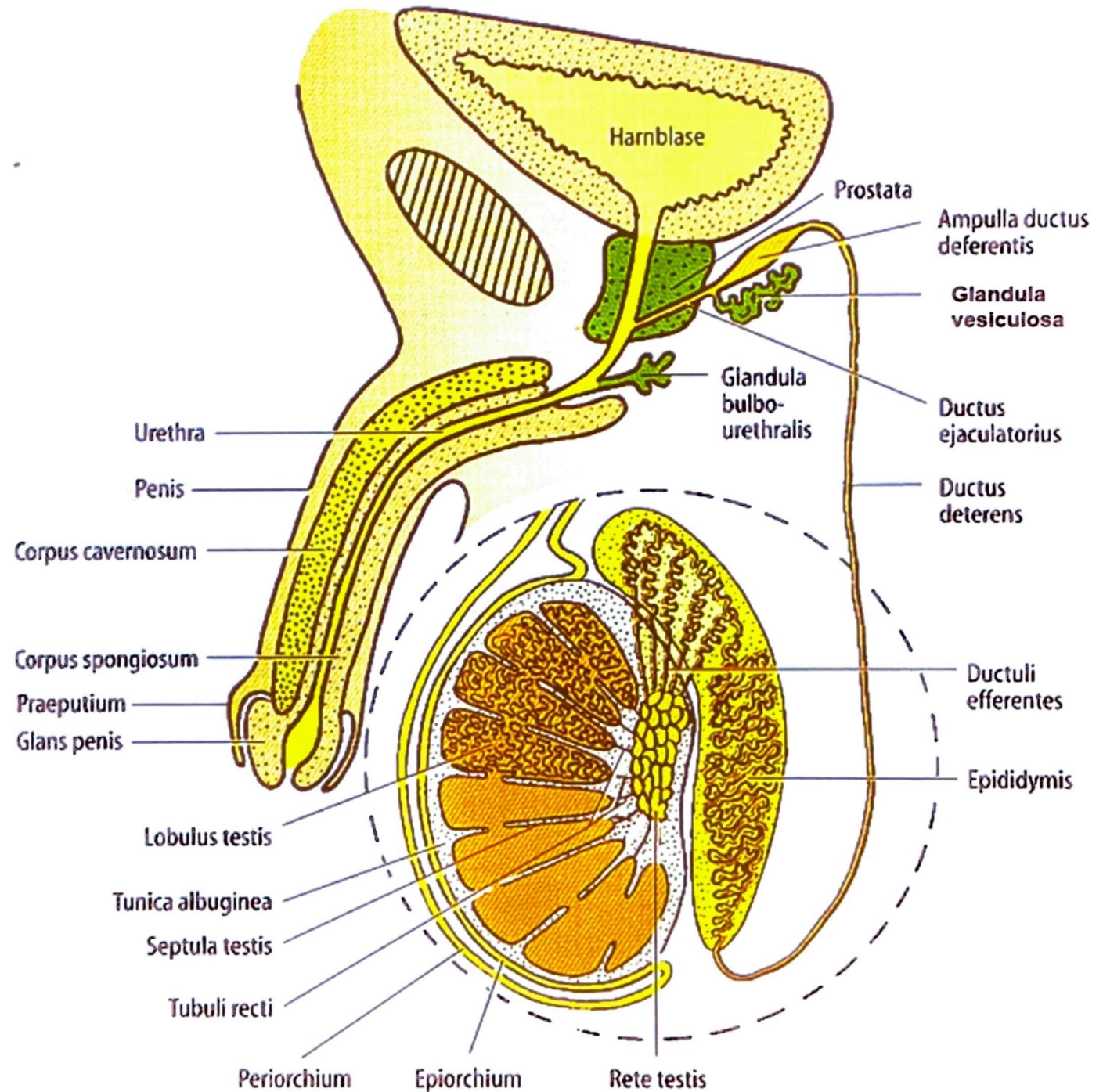
Leydig-Zellen



Regulation der Spermatogenese



Rete testis



Epididymidis (Nebenhoden)

Ductuli efferentes

- Anzahl: 12-20
- 10-12 cm auf 1 cm geknäult
- einschichtiges kubisches bis mehrreihiges hochprismatisches Epithel
- Mikrovilli- und Kinozilien-tragende Zellen
- girlandenartige Querschnitte, "Sägezahn-Muster"

Ductus epididymidis

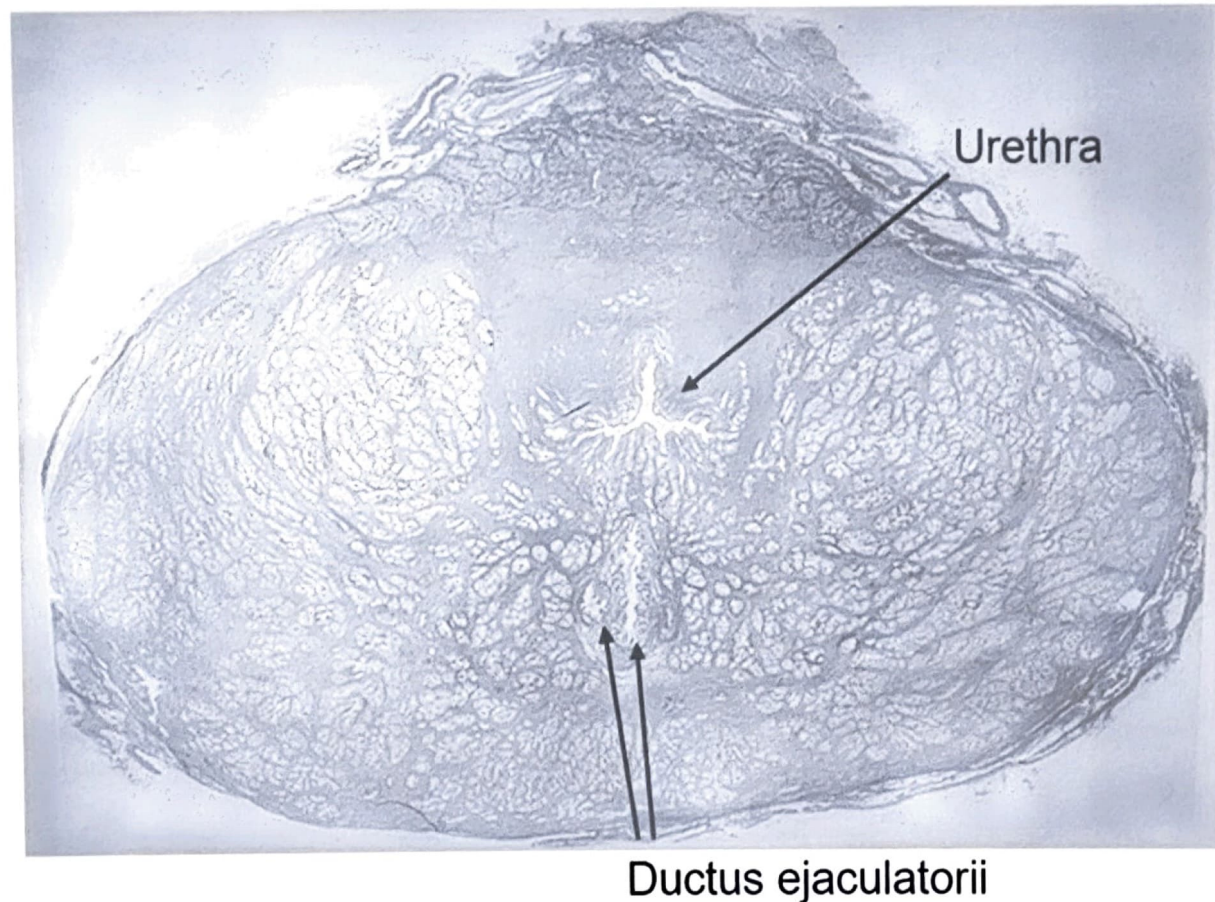
- zwei- bis mehrreihiges Zylinderepithel
- 6 m auf 5 cm geknäult
- kleine Basalzellen und hohe Zylinderzellen mit Stereozilien (Hauptzellen)

Prostata

Kastaniengroß
ca. 20 g

Aufbau:

- Kapsel
- Außenzone
- Innenzone
- Periurethrale Zone



Prostata**adenome** entstehen in der Innenzone;
Prostata**karzinome** überwiegend in der Außenzone

Prostata

- 30- 50 tubulo-alveoläre Drüsen
- “Prostatasteine”
- zumeist zweireihiges isoprismatisches Epithel
(aber auch flach bis hochprismatisch und einschichtig)
- Testosteron sensitive Drüse
- Stroma (Bindegewebe mit glatter Muskulatur)
- saures Sekret, 15-30% des Ejakulats
enthält u.a. Immunglobuline, Prostaglandine, Spermin, Zink

Prostatakarzinom

