

Table 27.1

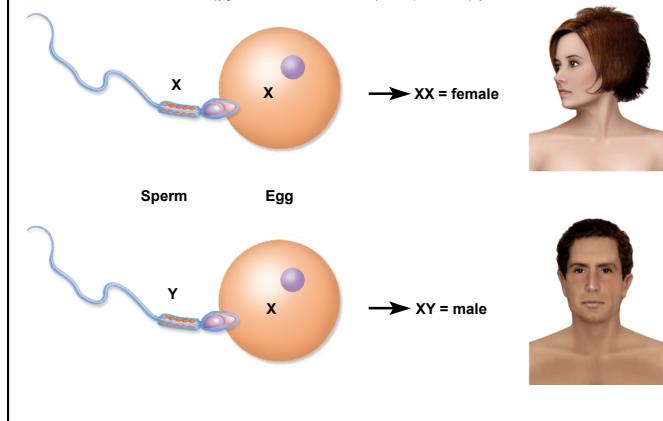
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TABLE 27.1 The External and Internal Genitalia	
External Genitalia	Internal Genitalia
Male	
Penis	Testes (s., testis)
Scrotum	Epididymides (s., epididymis)
	Ductus deferentes (s., ductus deferens)
	Seminal vesicles
	Prostate
	Bulbourethral glands
Female	
Mons pubis	Ovaries
Labia majora (s., labium majus)	Uterine tubes
Labia minora (s., labium minus)	Uterus
Clitoris	Vagina
Vaginal orifice	
Vestibular bulbs	
Vestibular glands	
Paraurethral glands	

1

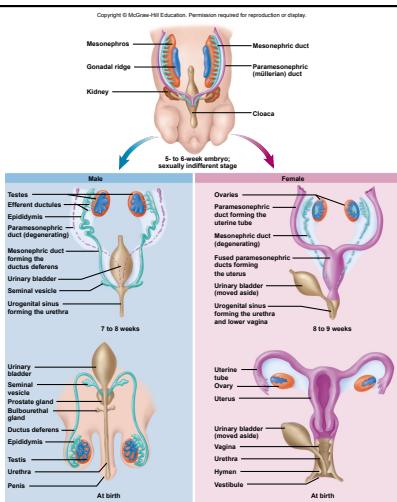
Fig. 27.2

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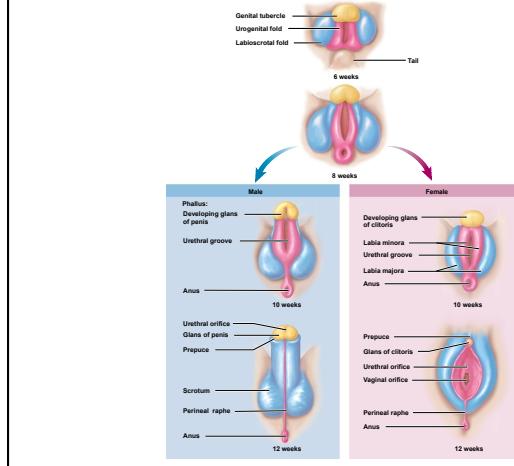
Fig. 27.3



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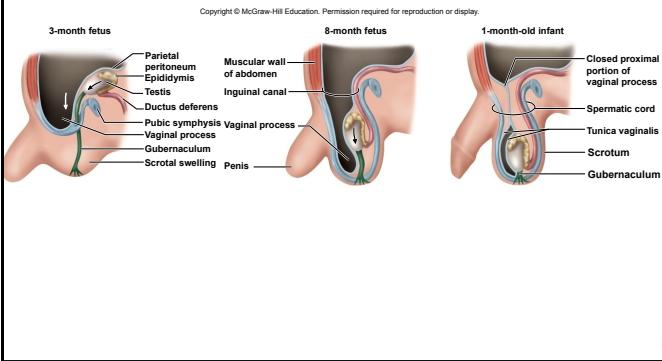
Fig. 27.4

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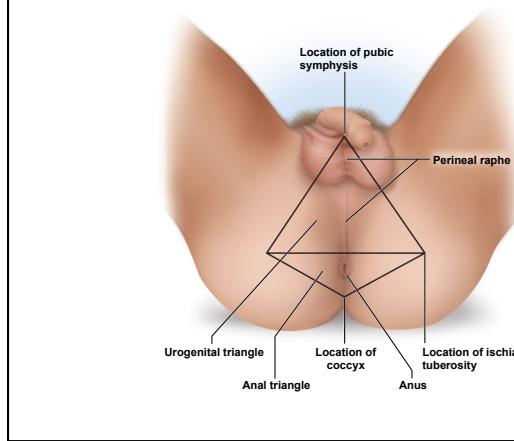
Fig. 27.5



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Fig. 27.6

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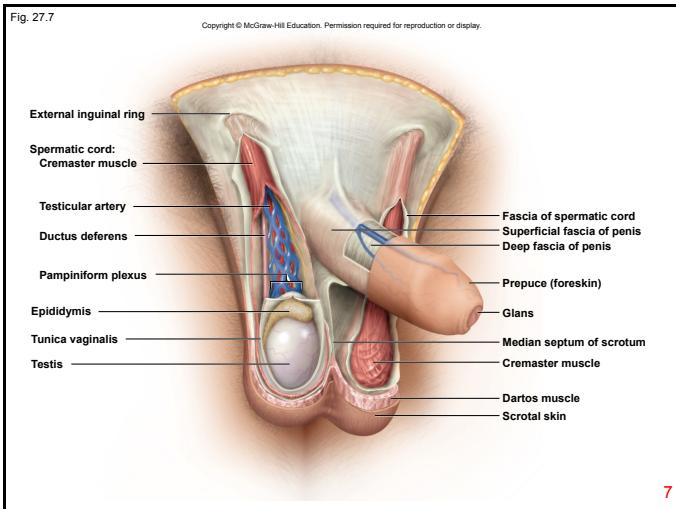


Fig. 27.9

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(a) External view of the testis and epididymis. Labels: Spermatic cord, Ductus deferens, Head of epididymis, Testis, covered by tunica albuginea, Tail of epididymis, Scrotum (folded down). Scale bar: 2 cm.

(b) Longitudinal section of the testis. Labels: Head of epididymis, Ductus deferens, Efferent ductule, Rete testis, Body of epididymis, Tail of epididymis, Spermatic cord, Blood vessels and nerves, Seminiferous tubule, Septum, Lobule, Tunica vaginalis, Tunica albuginea.

(c) Micrograph of seminiferous tubule wall. Labels: Interstitial cells, Blood vessel, Germ cells, Sustentacular cell, Tail of spermatozoon.

(d) Micrograph of a seminiferous tubule. Labels: Blood vessel, Seminiferous tubule, Spermatids, Sustentacular cell nuclei, Sertoli cell, Germ cells, Connective tissue wall of tubule, Interstitial cells. Scale bar: 50 µm.

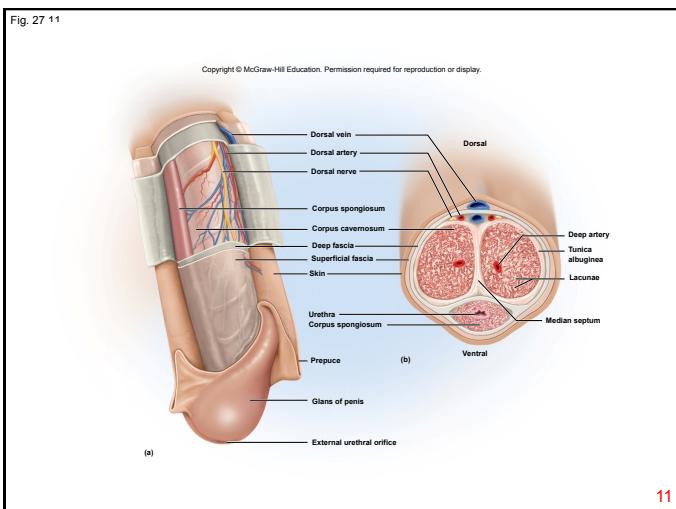
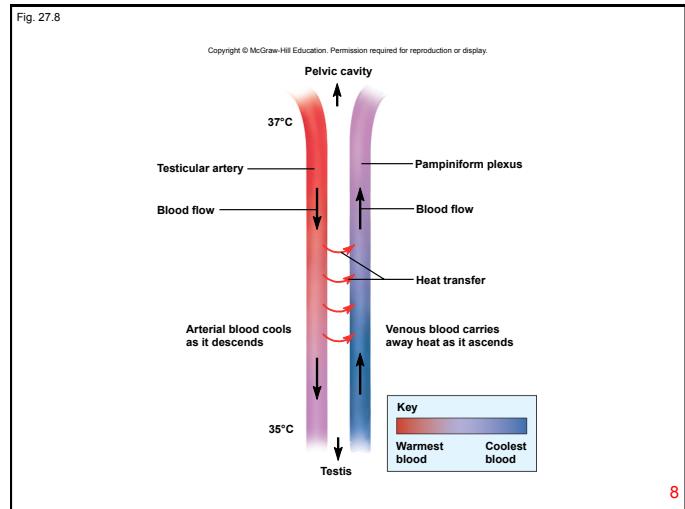


Fig. 27.12

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The diagram illustrates the hormonal feedback loop in the male reproductive system. It shows the Hypothalamus, Pituitary gland, and Testis. The Hypothalamus releases Gonadotropin-Releasing Hormone (GnRH). The Pituitary gland releases Follicle-Stimulating Hormone (FSH) and Luteinizing Hormone (LH). The Testis contains Sustentacular cells and Spermatogenesis interstitial cells. Androgen-binding protein (ABP) is produced by Sustentacular cells. Testosterone is produced by Spermatogenesis interstitial cells. Testosterone stimulates Libido and secondary sex characteristics. Testosterone also provides negative feedback to the Hypothalamus and Pituitary gland, and stimulates Sustentacular cells to produce ABP, which inhibits FSH secretion.

Key:

- Stimulation** (Green arrow)
- Inhibition** (Red arrow)

Labels and descriptions:

- ① GnRH from hypothalamus stimulates the anterior pituitary to secrete FSH and LH.
- ② FSH stimulates sustentacular cells to secrete androgen-binding protein (ABP).
- ③ LH stimulates interstitial cells to secrete testosterone (androgen).
- ④ In the presence of ABP, testosterone stimulates spermatogenesis.
- ⑤ Testosterone also stimulates the libido and the development of secondary sex organs and characteristics.
- ⑥ Testosterone has negative feedback effects that reduce GnRH secretion and pituitary sensitivity to GnRH.
- ⑦ Sustentacular cells also secrete inhibin, which selectively inhibits FSH secretion and thus reduces spermatogenesis without reducing testosterone secretion.

Fig. 27.13

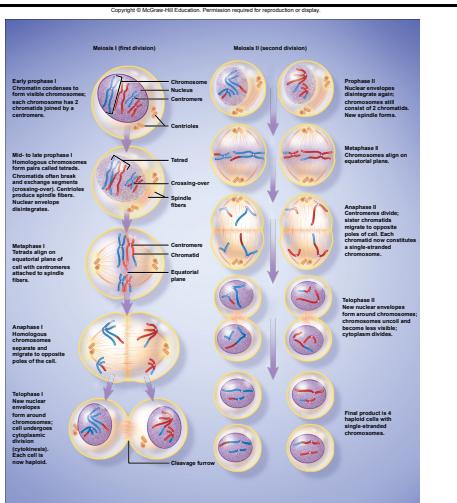


Fig. 27.14

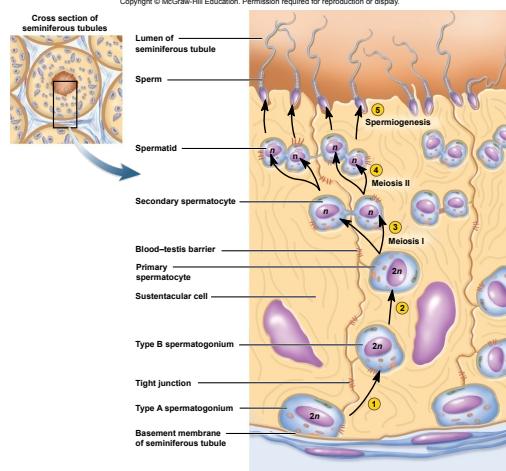


Fig. 27.15

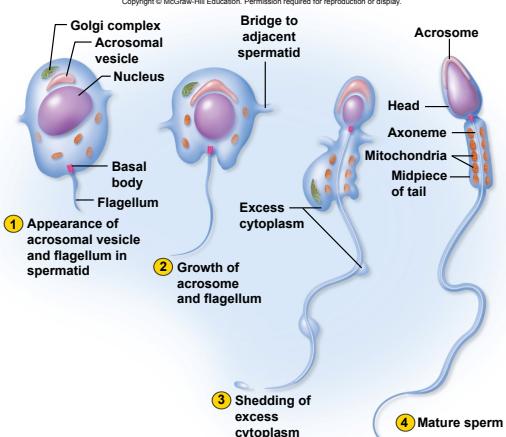


Fig. 27.16

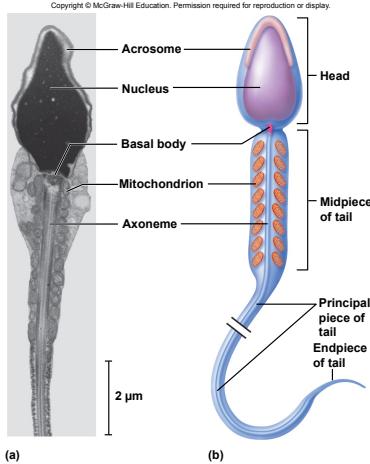


Fig. 27.17

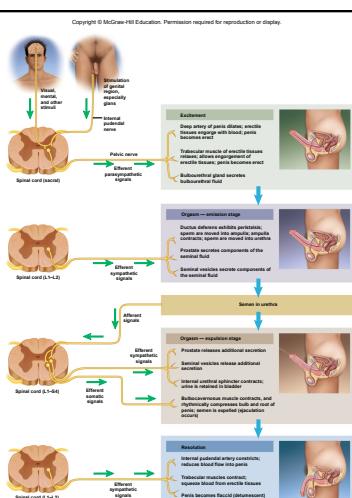


Fig. 27.18

