

The **male reproductive system** consists of the testes, a series of ducts, a number of glands, and the **penis**. Pronounced "tes-tees" (sing. *testis*), the **testes** are the primary organs of the system. The testes appear to be (but are not) suspended by the paired **spermatic cords** within a sac of skin and thin layer of fibromuscular tissue (*scrotum*).

Development of the male germinating cells (*sperm*, *spermatozoa*) in the testes requires a temperature slightly lower than that of the body (about 35°C or 95°F); this can be achieved in the **scrotum**, where the germ cells are separated from the warmer body and body cavities. The temperature within the scrotum can be adjusted slightly by the contraction/relaxation of smooth muscle (*dartos muscle*) in the scrotal wall, tightening or loosening the tension (tightness) of the scrotal skin about the testes.

Mature sperm are stored in the **epididymis**. With stimulus, in addition to their own motive power, sperm cells are induced to move quickly through the epididymis and **ductus deferens** by rhythmic contractions of the smooth muscle in the ductal walls. The ductus deferens, with its blood vessels and coverings, enters the superficial inguinal ring (at the medial attachment of the inguinal ligament). It passes through the abdominal wall (*inguinal canal*) for about 4 cm to emerge through the deep inguinal ring, wrapped in a layer of transversalis fascia (internal spermatic fascia) deep to the oblique muscles of the abdomen (see page 49). Each ductus deferens enters the retroperitoneal pelvic cavity, passes over the iliac vessels, crosses the ureter, and bends sharply behind the urinary bladder to descend and join with the duct of the **seminal vesicle** in the posterior wall of the **prostate gland** to form the pencil-point-shaped **ejaculatory duct** that opens into the *prostatic urethra*. Here the nutrient-rich secretions of the prostate gland and seminal vesicles are added to the population of sperm (*semen*). Prior to the expulsion of semen (*ejaculation*), the **bulbo-urethral glands** add secretions to the *spongy urethra* providing lubrication during intercourse.

Each **testicular artery** (see page 111) arises from the abdominal aorta just below the renal arteries. The *testicular vein* leaves the testis as the **pampiniform plexus of veins** (see lower illustration). In this view, the relationships of the testicular artery and the ductus deferens to the venous plexus can be seen. A small part of the internal spermatic fascia (K) can be seen as well (recall page 49). For the larger view of the merging of the testicular veins with the inferior vena cava (right side) and left renal vein, see page 116.