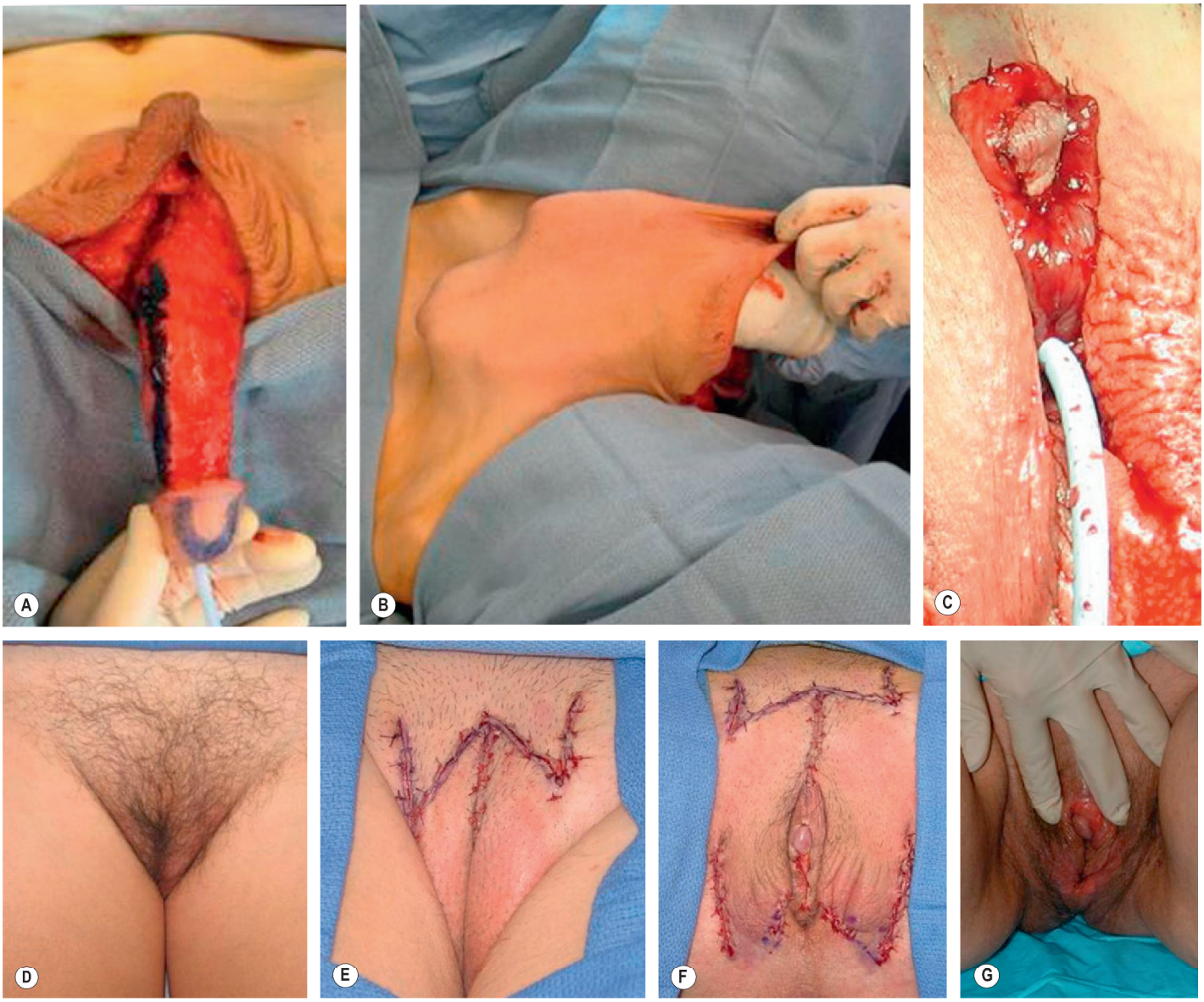

Fig. 15.11 **(A)** Intraoperative. Demonstrating design of neo-clitoris. **(B)** Undermining of the lower abdominal skin to the level of the umbilicus. Undermining facilitates advancement of the penile flap into the intravaginal position. **(C)** Design of the urethral flap to form the labia minora and prepuce of the neo-clitoris. **(D)** Postoperative. After single-stage vaginoplasty. **(E)** Postoperative. Following second-stage labiaplasty. Note the convergence of the labia majora in the mons pubis. **(F)** Postoperative. Following second-stage labiaplasty. Note the prepuce of the neo-clitoris. **(G)** Postoperative. Demonstrating moist appearance of labia minora and neo-clitoris with associated prepuce.

umbilicus (*Fig. 15.11B*). This facilitates intravaginal positioning of the penile flap.[44] Depending upon the length of the penile flap, skin grafts may be required to increase vaginal depth. These may be harvested as full-thickness grafts from the nonused scrotum, groin crease, or lower abdomen. Additionally, split-thickness grafts may be harvested from the mons or lower abdominal region.[45] The scrotal-perineal flap is sutured to the penile flap over a silastic stent and advanced into the intravaginal position. A "Y"-shaped incision is made in the penile flap in order to create the urethral meatus. The penile urethra is shortened and incised ventrally. This creates a urethral flap through which the glans penis will be placed, thereby creating the labia minora and providing a prepuce to the neo-clitoris (*Fig. 15.11C*). The scrotal skin is then tailored to form the labia majora, and the incisions are closed in a layered fashion with absorbable sutures. Drains are placed on either side of the vaginal cavity (*Fig. 15.11D*).

Although most surgeons perform a single-stage vaginoplasty, an optional second-stage, referred to as a labiaplasty, may be performed for further feminization of the mons pubis. This procedure is usually performed under local anesthesia, approximately 3 months after the vaginoplasty. The labiaplasty involves a local tissue rearrangement, frequently in the form of multiple "z"-plasties, so as to create convergence of the labia majora, and provide for additional clitoral hooding (*Figs 15.11E–15.11G*).

Technical variations include the use of a urethral flap inset within the penile skin designed to either lengthen or provide lubrication to the vaginal cavity.[46] Additionally, intravaginal placement of the glans penis to act as a neo-cervix has been described.[47]