

extreme diastasis to increase the likelihood of successful bladder closure. In bladder exstrophy patients, the upper urinary tract is usually normal. Fertility is possible in females but decreased in males, possibly because of semen abnormalities, abnormal ejaculation, or a combination of both. Assisted reproductive techniques remain a viable option for patients with infertility. Recent studies indicate good long-term outcomes on erectile and general sexual function in both men and women with epispadias and bladder exstrophy ([Suominen, Santtila, Taskinen, 2015](#)).

## Therapeutic Management

The objectives of treatment are (1) preservation of renal function, (2) attainment of urinary control, (3) adequate reconstructive repair for acceptable appearance, (4) prevention of UTIs, and (5) preservation of optimum external genitalia with continence and sexual function. There are two surgical approaches currently utilized to correct bladder exstrophy. One is termed *modern staged repair of exstrophy (MSRE)*, typically involving three surgeries beginning with closure of the bladder and abdominal wall. Complete primary repair of bladder exstrophy (CPRE) is a single-stage surgical closure combining closure of the bladder, abdominal wall, partial tightening of the bladder neck, and bilateral ureteral reimplantation to correct reflux. Often, pelvic osteotomies are performed at the time of primary closure to deepen the flattened pelvis, close the pubic diastasis, and release tension on the abdominal wall to improve success of primary closure ([Inouye, Turchi, and Di Carlo, 2014](#)).

For the child with bladder exstrophy, CPRE may be performed within the first 72 hours of life or as a delayed procedure at about 2 months old. For the child with cloacal exstrophy, pelvic osteotomies are needed because of the wide pelvic diastasis and surgery is done within 48 to 72 hours of life to close the bladder and omphalocele and perform intestinal diversion ([Inouye, Turchi, and Di Carlo, 2014](#)).

In some children, reconstruction (tightening) of the bladder neck may not provide sufficient resistance to achieve urinary continence. In these cases, suburethral collagen injections or implantation of an artificial urinary sphincter may be performed. Occasionally, the bladder fails to achieve an adequate functional capacity, and