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Videos

Videos pertaining to this book can be accessed online at www.crcpress.com/cw/Docimo. The content of these videos can be broken into two categories: those cited and captioned in the text of the book itself, and those comprising a separate Atlas created by Pippi La Salle.

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FIGURE 1.3 Abdominal mass.

With regard to the physical examination of pediatric malignant masses, neuroblastoma typically presents as a firm, irregular mass, which crosses the midline due to its propensity for dissemination and multiple potential sites of origin. Conversely, Wilms' tumor typically presents as a mobile abdominal and flank mass, which does not cross the midline.

In patients with symptoms of urinary tract infection, pyelonephritis should be ruled out. Pyelonephritis, or any condition that distends the renal capsule (stone, periphenic abscess, etc.), will cause tenderness at the costovertebral angle.

Examination of the Bladder

The bladder is amenable to examination by both palpation and percussion. Palpation of the bladder should begin at the umbilicus and move caudally toward the symphysis pubis. The bladder is rarely palpable in most patients. A palpable bladder may be soft or tense, depending on its volume and also on the thickness of the detrusor muscle. The finding of bladder distension should prompt further evaluation for bladder outlet obstruction, neuropathic bladder, incomplete bladder emptying, or urinary retention (Figure 1.4).



FIGURE 1.4 Palpation of distended bladder.

Significant bladder distension may be visible even on inspection as convex protuberance in the hypogastric region. If bladder distension is suspected based on physical exam, additional evaluation with ultrasound is warranted.

Genital Examination

Importance of the Genital Exam

The genital exam is not only the specific domain of the pediatric urologist, whose expertise in examining this area surpasses that of any other specialist, but also a part of the physical exam that is conducted less frequently by the generalist due to its intimate nature. Therefore, missed diagnoses in this area can go unnoticed for longer periods of time than other more readily accessible physical areas. In addition, many genital issues are congenital in origin and best repaired when the child is young. Finally, some genital conditions (undescended testes and disorders of sexual differentiation), whether repaired early or not, may have a significant medical and psychosocial effect on the patient later in life if they go undiagnosed.

Examination of the Scrotum and Its Contents

Examination of the scrotum begins, like other areas of the body, with

inspection. Inspection may not only identify rare congenital malformations, such as disorders of sexual differentiation, but also provide insight into more common conditions. The inguinal and scrotal areas can be assessed simultaneously, looking for asymmetry, hernias, hydroceles, and undescended testes. Hydroceles should be closely examined to ensure that the testes can be palpated. Transillumination is frequently performed to demonstrate a fluid-filled hydrocele sac (Figure 1.5). Failure to identify a testis by palpation in a patient with a tense hydrocele should always prompt further evaluation with a scrotal ultrasound regardless of the results of transillumination, but particularly when transillumination suggests a solid mass³⁸ (Figure 1.6). The position of the testes in the scrotum should be observed prior to touching the patient, and invariably descended and retractile testes will be visible prior to palpation. Placing a hand over the inguinal area at the pubic tubercle before touching the scrotum will prevent a retractile testis from ascending into the inguinal area in response to the cremasteric reflex, and allow the examiner to distinguish a retractile from an undescended testis (UDT) (Figure 1.7a and b). The examination of the scrotal contents should be performed during each visit despite the findings of scrotal testes on an earlier visit, to exclude the possibility of testicular ascent.³⁹ When examining a child for an undescended testis, gliding the soap-lubricated examining fingers over the child's inguinal area will often reveal the location of the testis, allowing the examiner to distinguish a palpable undescended testis from a nonpalpable testis. As the boy reaches adolescence, the first sign of puberty is the growth of the testes, which usually occurs around 11–12 years of age, corresponding to Tanner stage II.