

## *Introduction*

Anorectal Anomalies include a wide spectrum of defects in the development of the lowest portion of the intestinal and urogenital tracts. (*Pena & Hong 2005*).

Many children with these malformations were said to have an imperforate anus because they have no opening where the anus should be. Although the term may accurately describe a child's outward appearance, it often belies the true complexity of the malformation beneath. When a malformation of the anus is present, the muscles and nerves associated with the anus often have a similar degree of malformation. The spine and urogenital tract may also be involved. Thus, all these anomalies are now collectively listed below the title of "Anorectal Anomalies" (*Levitt & Pena 2007*).

The position and nature of these anomalies made repair difficult for early surgeons. The affected organs are located deep in the pelvis and are not well visualized through abdominal incisions. Traditional surgical dictum did not allow for division of the posterior midline because this division of the muscle was believed, somewhat erroneously, to cause incontinence in the child. Therefore, surgeons approached these malformations using a combined abdominal, sacral, and perineal approach, with limited visibility. Such approaches have put continence, and surrounding genitourinary structures, at greater risk than simply cutting sphincter muscles because of the difficulty of adequately visualizing the malformation through limited incisions. This principle was central to the development of the surgical techniques currently used to repair these malformations (*Murphy et al. 2006*).

Later on, a traditional approach with a sacral incision was used with progressively larger incisions in an attempt to adequately visualize the anatomy. Eventually, the entire posterior sagittal plane was opened, affording a full view of the complete malformation. This technique, referred to as posterior sagittal anorectoplasty (PSARP) or "Posterior sagittal anorectovaginourethroplasty" (PSARVUP), has led to a more complete understanding of the anatomy of these children and of what is required to repair the malformations with optimal results (*Pena & Hong 2005*).

After reconstructive surgery for the malformation, many children still experience effects in the form of urinary or fecal incontinence. Despite optimal surgical management, no adequate repair for poorly developed muscles or nerves has been developed. Bowel-management regimens can provide an excellent quality of life for these children when primary continence is not achievable (*Pena & Levitt 2005*).