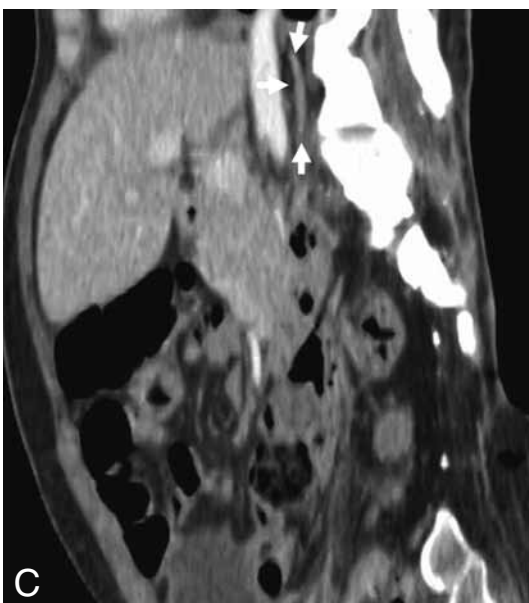
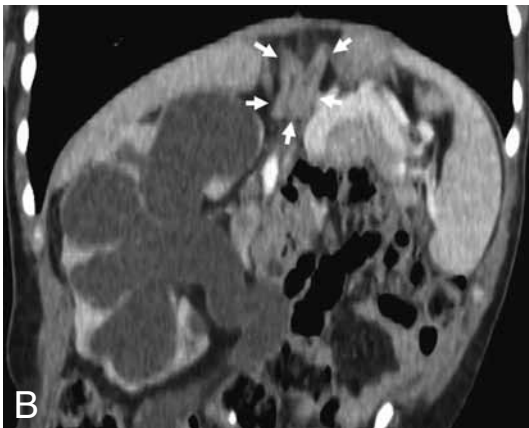


IMAGES IN CLINICAL RADIOLOGY



Adrenal gland fusion

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A 22-year old female was referred to our hospital for CT-evaluation of the abdomen. Her medical history revealed a congenital lumbosacral spina bifida with meningomyelocele, which was surgically closed at the age of 22 months. She had a neurogenic bladder with hydronephrosis of the right kidney and recurrent upper urinary tract infections. Her left kidney had been resected for renal atrophy. She had a rudimentary uterus with imperforate hymen. A fusion of the adrenal glands, with retroaortic bridging, was incidentally found (A-C).

Comment

Congenital fusion of the adrenal glands is a rare congenital anomaly with only about 65 cases reported in literature. The fusion occurs across the midline in the retroperitoneum anterior or posterior to the aorta. The shape of the fused adrenal may vary, with poles oriented cranially or caudally, sometimes referred to as 'horseshoe adrenal gland', or with central poles, designated as 'butterfly shape'.

Fused adrenal glands are almost always associated with other congenital anomalies, such as major central nervous system malformations, renal agenesis, asplenia, anomalies of the internal genitalia and complex cardiac anomalies. The exact embryologic pathogenesis of adrenal gland fusion is unclear. The histologic appearance of the fused adrenal gland is similar to that of separate adrenals, and there seem to be no functional impairments.

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