

Cystic Ganglionosis in Child: Rare Entity

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Abstract : Introduction: Ganglion cyst is a benign condition in which there is a cystic lesion in relation to a joint or a tendon sheath arising from myxoid degeneration of fibrous connective tissue. These can be unilocular or multilocular. In rare cases, there may be multiple ganglion cysts, known as cystic ganglionosis. They can occur at any age but are commonly seen in adults. Clinically they may be asymptomatic or present as swelling or mass effect in adjacent structures. These are common in extremities such as hands and feet. Case Presentation: 11-year-old female child presented with slowly progressive painless swelling of her right hand since the age of 4. Antenatal and perinatal history was unremarkable. Her family history was negative. She denies fever, malaise, morning stiffness, weight loss, fatigue, restriction of joint movements, or any sensory and motor deficit. Lab parameters were negative for inflammatory or infectious etiology. No other joint or extremity involvement was present. On physical examination, the swelling was present on the dorsum and palmar aspect of the right hand and wrist. They were non-tender on palpation without any motor or sensory deficit. MRI hand revealed multiple well-defined fluid signal intensity cystic appearing lesions in periarticular/intraarticular locations in relation to distal radio-ulnar, radio-carpal, intercarpal, carpometacarpal, metacarpophalangeal and interphalangeal joints as well as peritendinous location around flexor tendons more so in the region of wrist, palm, 1st and 5th digit and along extensor tendons in the region of wrist, largest one noted along flexor pollicis longus tendon in thenar region and along 1st digit measuring approx. 4.6 x 1.2 x 1.2 centimeter. Pressure erosions and bone remodelling were noted in the bases of the 2nd to 5th metacarpals, capitate, trapezoid, the distal shaft of 1st metacarpal, and proximal phalanx of 1st digit. Marrow edema was noted in the base and proximal shaft of the 4th metacarpal and proximal shaft of the 3rd metacarpal - likely stress or pressure related. The patient was advised of aspiration, but the family refused the procedure. Therefore the patient was kept on conservative treatment. Conclusion: Cystic ganglionosis is a rare condition with very few cases reported in the medical literature. Its prevalence and association are not known because of the rarity of this condition. It should be considered as an important differential in patients presenting with soft tissue swelling in extremities. Treatment option includes conservative management, aspiration, and surgery. Aspiration has a high recurrence rate. Although surgery has a low recurrence rate, it carries a high rate of complications. Imaging with MRI is essential for confirmation of the cystic nature of lesions and their relation with the joint capsules or tendons. This helps in differentiating from other soft tissue lesions and presurgical planning.

Keywords : radiology, rare, cystic ganglionosis, child

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