Hypoparathyroidism

Sir,

A 20-year-old female presented with seizures, spasmodic contractions and paresthesia of limbs of the left side and ataxic gait of 3 years duration. Carpopedal spasm was present. Trousseau’s and Chovstek’s signs were positive. Cerebellar signs were positive. Biochemical analysis revealed hypocalcemia (1.3 mmol/L; normal range 2.10–2.60 mmol/L), hyperphosphatemia (2.5 mmol/L; normal range 0.8–1.5 mmol/L) and low Parathyroid hormone level (0.6 pmol/L; normal range 1.5–7.6 pmol/L). Imaging [Figure 1] revealed intracranial calcification. Hypocalcemia results in increased neuromuscular excitability, which manifests as tetany, paresthesia, seizures, organic brain syndrome or calcium deposition leading to cataract or intracranial calcification. Supplementation with calcium and 1,25-dihydroxy vitamin D is helpful in preventing seizures and progression to extrapyramidal disorders.[1,2]

Idiopathic hypoparathyroidism is an infrequent condition of unknown etiology. Accepted criteria for its diagnosis are (a) low serum calcium, (b) high serum inorganic phosphates and (c) exclusion of renal insufficiency, steatorrhea, chronic diarrhoea, alkalosis and rickets and osteomalacia. The classic findings in a patient with hypoparathyroidism are a rounded expressionless face, a shorter height than average and cataract. Dental hypoplasia and aplasia develop depending upon the age at the time of onset of the disease. In idiopathic hypoparathyroidism, basal ganglia calcification and extrapyramidal syndromes are more frequently seen, and symptoms are earlier in onset. In pseudohypoparathyroidism, there is ineffective parathormone action rather than a failure of parathyroid hormone production. However, it shares several clinical features with hypoparathyroidism.[3]

Hypocalcemia increases the neuromuscular excitability, which may result in tetany. Lower degrees of neuromuscular excitability may lead to latent tetany, which can be elicited by Chovstek’s and Trousseau’s signs. Chovstek’s sign is demonstrated by tapping the skin over the facial nerve anterior to the external auditory meatus, and results in ipsilateral contraction of the facial muscles. Trousseau’s sign is produced by inflating a sphygmomanometer to 20 mmHg above the systolic blood pressure for 3–5 min, which results in ischemia of nerves in the upper arm leading to thumb adduction, metacarpophalangeal joint flexion and interphalangeal joint extension.[1,3]

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References


Limited unilateral partial laminectomy and lateral dural incision: One of the best approaches for spinal meningioma in selected cases

Sir,

Meningioma is second most common intra spinal tumor, accounting for 25-46% of all spinal canal tumors.[1] In most of the patients, tumor is located in extramedullary- intradural compartment. It is situated predominantly either laterally (58%) or anteriorly (18%) compared to posteriorly (24%), in spinal canal.[2] Generally, spinal meningiomas are less vascular and their incidence is high in late middle to elderly group females between the fifth and seventh decades of life, with a female-to-male ratio of 4.3 to 1.[1,3]

Traditionally, spinal meningiomas are approached by a wide multilevel laminectomy and a midline dural incision.[4-6] A wide multilevel laminectomy may cause instability, subsequent progressive kyphosis in the future, soft tissue injury and dural scaring which may cause significant post-operative pain, long hospital stay, and progressive neurological deterioration.[5,6] In elderly females, bones are generally osteoporotic, which further complicates the situation. Midline dural incision for a laterally or anteriorly placed lesion unnecessarily exposes the entire dorsal surface...