Surgical management of hyperp arathyroidism

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151SUMMARYThe disorders of parathyroid functions are either increased function”hyperparathyroidism” or decreased function ”hypoparathyroidism” which mayneed implantation.Hyperparathyroidism is a disease characterized by general symptoms ofelevated serum calcium manifested by muscular weakness, dyspepsia, polyuria,anorexia and psychiatric disorder. Late manifestations of the disease includebone demineralization, pathological fractures, renal stones and metastaticcalcification.Primary hyperparathyroidism starts in parathyroid glands as an adenomaor hyperplasia or rarely as a carcinoma.Secondary hyperparathyroidism is a compensatory response to systemichypocalcemia as with chronic renal failure or as with malabsorption syndrome.Tertiary hyperparathyroidism occurs when -secondary hyperplasia becomesautonomous.In ectopic hyperparathyroidism non parathyroid neoplasms may produceparathyroid hormone or parathyroid hormone like peptide thus, causinghypercalcemia.The disease is diagnosed on account of elevated serum calcium andparathormone levels. Other investigations are used to exclude other causes ofhypercalcemia.158There is a general agreement that the only corrective treatment ofhyperparathyroidism is surgical removal of overactive gland or glands.Experience of the surgeon and preoperative localization of enlarged glands byusing sonography (high-resolution), or (CT), or thallium-technetium scanning,or magnetic resonance imaging (MRI) and other modern techniques are of greatimportance in parathyroid surgery. If the cause is solitary adenoma, it isremoved and other glands inspected, biopsy is optional, if the cause ishyperplasia, there are two current options for surgical treatment:I. Subtotal parathyroidectomy with preservation of a well vascularizedremnant or parathyroid gland in situ similar in size and weight to thenormal gland; or,2. Total parathyroidectomy with immediate autotransplantation into theforearm musculature. The rational for the latter, approach is easier to thetransplanted parathyroid tissue in the event of recurrent disease.Parathyroid autotransplantation can be delayed using cryopreserved tissueis now in use to correct postoperative hypoparathyroidism.