

Mutation in what protein would give rise to the autosomal dominant condition manifesting with hypercalcemia, amenorrhea and an incidental pancreatic mass lesion?

ANSWER: MENIN

The clinical findings of hypercalcemia (hyperparathyroidism), amenorrhea (pituitary tumors, such as prolactinoma) and incidental pancreatic mass (pancreatic endocrine tumor) should lead a clinician to consider Multiple Endocrine Neoplasia, specifically Type 1 (also known as Wermer's syndrome), which is caused by mutation in the protein MENIN. The RET proto-oncogene (option B) is altered in MEN 2-A (also known as Sipple's syndrome), which is characterized by medullary carcinoma of the thyroid, pheochromocytoma and hyperparathyroidism. MEN 2-B is also caused by an alteration in the RET proto-oncogene at the tyrosine kinase domain, and is characterized by medullary carcinoma of the thyroid, pheochromocytoma, mucosal neuromas and marfanoid habitus.