

Shalamar Hospital is striving to provide our patients quality health care, at lowest possible costs. Our hospital is continually active in pioneering new treatments and therapies to improve the lives of people in our community.



PTH LEVELS AND PHPT

PTH levels are influenced by dietary calcium intake and vitamin D status, and can be raised in people with insufficient calcium intake or vitamin D deficiency. High PTH levels are also associated with normal calcium levels in people with significant kidney disease, known as secondary hyperparathyroidism. Other causes of elevated PTH levels include increased urinary calcium, malabsorption, drugs, and other less common causes.



Primary Hyperparathyroidism

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The parathyroid glands are four small glands located in the neck, behind the thyroid gland. They secrete parathyroid hormone (PTH) into the bloodstream, which helps regulate levels of calcium and phosphate in the body. Two common parathyroid disorders are Primary Hyperparathyroidism (PHPT) and Hypoparathyroidism (HypoPT), which differ in their effects on PTH production.

PRIMARY HYPERPARATHYROIDISM (PHPT)

PHPT occurs when one or more parathyroid glands produce excessive PTH, leading to high levels of calcium and low levels of phosphate in the blood. Common causes of PHPT include non-cancerous tumors on the glands and enlargement of two or more glands. Symptoms of PHPT may include thirst, frequent urination, fatigue, memory impairment, mood disturbance, muscle and bone pain, constipation, and abdominal pain. Treatment may include monitoring, medication, or surgery.

HYPOPARATHYROIDISM (HYPOPT)

HypoPT occurs when the parathyroid glands produce too little PTH, causing low levels of calcium and high levels of phosphate in the blood. Symptoms may include muscle cramps, spasms, and twitching, as well as tingling or burning sensations in the fingers, toes, and lips. Treatment may include calcium and vitamin D supplements.

MAINTAINING BALANCED CALCIUM AND PHOSPHATE LEVELS

Calcium and phosphate are essential for strong bones and teeth, as well as proper muscle and nerve function. The body closely regulates their levels to prevent harmful imbalances. If you have a parathyroid disorder, it is important to follow dietary and medical recommendations to manage your condition and maintain optimal health.

TREATMENT FOR PHPT

PHPT can only be cured by surgically removing the affected gland(s). Surgery is recommended for patients who have symptoms likely caused by high calcium levels, significantly elevated calcium levels, younger age, bone-thinning or fractures, and kidney stones. However, in cases where none of these factors are present, monitoring calcium levels and medication may be considered as an alternative to surgery. Neck imaging is performed to identify the enlarged parathyroid gland(s) before surgery, and more than one type of scan may be required. Surgery has benefits such as improving bone density and reducing the risk of kidney stones, but it is difficult to predict if it will improve symptoms. The risks associated with surgery include wound infection, bleeding, scar, neck stiffness, hoarseness, low calcium levels, and the need for a second operation.

ALTERNATIVE TREATMENTS AND RISKS

Drugs can be prescribed to help improve bone density, but they typically have little effect on calcium levels. A medication called cinacalcet can be prescribed to lower calcium levels but has no significant effect on bone density and kidney stone risk. If surgery is not pursued, regular monitoring of calcium levels is recommended to identify individuals with rising calcium. Without surgery, PHPT may cause symptoms and complications that affect the bone and kidney. It is important to carefully consider whether surgery is necessary during follow-up.

PREGNANCY AND PHPT

It is recommended to defer pregnancy until after surgery because PHPT with hypercalcemia can be harmful to the unborn and newborn.