Do you want to know?

Hyperparathyroidism

C04
sheet 1/2

What is it?

Parathyroid glands are located in the neck. These glands secrete a hormone called parathormone. Parathormone helps the body to maintain a normal blood calcium and phosphorus level. Both are minerals that are important for the health of bones, teeth and many body functions.

Hyperparathyroidism is the over production of parathormone by the parathyroid glands. This will result in the increase of the blood level of calcium.

This overproduction of parathormone may be the result of one of three conditions:

- The most common cause, in more than 80% of cases, is a non-cancerous tumor in one of these parathyroid glands, called adenoma.
- In 10-15% of cases it is the enlargement of one or more of the parathyroid glands, called hyperpalasia.
- In less than 2% of cases, it is parathyroid cancer.

What do you need to know?

Population at risk

- Hyperparathyroidism occurs at any age.
- It is more common in older subjects and in postmenopausal women.
- Familial cases have been reported. In that instance, the age of onset is lower, around 25 years of age.

Symptoms

- The disease may be silent in around 80% of cases.
- Symptoms are due to high blood calcium level. These include: fatigue, weakness, loss of appetite, mild depression and difficulty concentrating, constipation, nausea and vomiting, calcification of cartilage in the joints, and skeletal pain.
- Other symptoms are related to the excessive excretion of calcium by the kidneys. When calcium level rises, the kidneys excrete more calcium into the urine resulting in kidney stones, which will impair the ability of the kidneys to filter blood.
- Because calcium is reabsorbed from bones, bone density may decrease resulting in fractures.
- Some patients may have an imbalance in other chemicals in their blood such as low phosphate levels and a few patients may have slightly low magnesium levels.

Treatment options

Non-surgical

Non-surgical treatment may be recommended if the patient is older, does not have symptoms and if the blood calcium level is not very elevated. However, close monitoring by a physician is recommended.

Increase fluid intake (at least 2 liters of water per day) to minimize the risk of kidney stones. Avoid lithium and thiazide containing medications since these drugs may further increase blood calcium levels as advised by your physician.

Surgical treatment

Surgery is recommended in younger patients, in patients with symptoms, those with calcium level exceeding the upper normal limit by 1 mg/dl or more, in those with significant excretion of calcium in the urine, and those with kidney stones.

Considerations

- Always use medications as prescribed by your physician.
- Increase the intake of foods rich in fiber to prevent constipation.
- Report any signs of abdominal pain or blood in urine.
- Ambulate as much as possible. Physical activity

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helps maintain bone density.

- Avoid severe activities to prevent bone fractures.
- Discuss with your physician what calcium and vitamin D intakes you should have. Low calcium intake and vitamin D deficiency can stimulate more parathormone secretion and bone resoprtion, whereas excessive intake may increase calcium level in blood.
- Do periodic blood tests as requested by your physician.

INSTRUCTIONS