NHS
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Hyperparathyroidism

This leaflet is for patients diagnosed with hyperparathyroidism and explains its symptoms, possible causes and what treatment options are available.

About the parathyroid glands

We have four parathyroid glands, controlling blood calcium levels. In hyperparathyroidism, one or more of the parathyroid glands behaves inappropriately by making excess parathyroid hormone (PTH) resulting in high blood calcium levels.

What causes hyperparathyroidism?

The most common cause is the development of a benign tumour in one of the parathyroid glands (primary hyperparathyroidism). This overactive parathyroid gland is almost never cancerous (less than one in 500); however, it slowly causes damage to the body because it takes calcium off the bones into the blood, causing high level of calcium in the blood and urine, and potentially causing bone weakness.

A minority of all patients with primary hyperparathyroidism will have an enlargement of all four parathyroid glands, a term called parathyroid hyperplasia. In this instance, all of the parathyroid glands become enlarged and produce too much parathyroid hormone.

What are the symptoms?

Symptoms are usually caused by high calcium levels in blood and urine. Many patients have no symptoms, or only mild symptoms. Some patient have more severe symptoms. The symptoms include:

- Excessive urination
- Tiredness,
- Low mood or memory impairment
- Abdominal pain, reduced appetite, nausea or vomiting
- Muscle and joint aches

Although most people with primary hyperparathyroidism report feeling well when the diagnosis is made, many patients will actually say they feel better after treatment.

In many patients with hyperparathyroidism, bones can give up so much of their calcium that the bones become brittle (osteoporosis). This condition will make the bones break easily.

Another relatively common presentation for persistently raised calcium levels is the development of kidney stones.

Other symptoms of hyperparathyroidism are the development of gastric ulcers and pancreatitis, although these are rare complications.

Potential complications of hyperparathyroidism

- Osteopenia (when your bones are weaker than normal but not so far gone that they break easily)
- Osteoporosis (very brittle bones)
- Bone fractures
- Kidney stones
- Nervous system complaints
- Peptic ulcers
- Pancreatitis

How is hyperparathyroidism diagnosed?

The diagnosis is made by a simple blood test, measuring calcium and parathyroid hormone levels in the blood. Vitamin D is always checked, and replaced if low, as low vitamin D can also cause elevation of parathyroid hormone.

What treatment is available?

Not all patients with primary hyperparathyroidism need treatment.
Indications for treatment will depend on the degree of high calcium, whether the patient has osteoporosis or a kidney stone, or whether the patient has symptoms in keeping with hyperparathyroidism.
If treatment is needed, it is normally surgery, targeting the abnormal gland or glands.
If treatment is required, but surgery is deemed inappropriate, then we can offer medical treatment as an alternative.
If the calcium levels are only mildly elevated and there are no complications caused by this, regular monitoring may be sufficient.

If you have any questions about this leaflet, please contact:

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To find out more about our Trust visit www.royalberkshire.nhs.uk

Please ask if you need this information in another language or format.

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