



ACT Palliative Care
Society Inc.



Calvary
Health Care
ACT



Australian Government
Department of Health and Ageing

Introduction

Hypercalcaemia (pronounced *Hi-per-kale-see-me-a*) is perhaps one of the more common complications associated with advanced cancer. One in ten people with cancer develop this problem and in most cases it is readily treatable. Left untreated it is fatal.

Calcium is the building block of our bones. There is a lot of calcium in the body and most of it belongs inside the bones. Hypercalcaemia is a condition characterised by an abnormally high level of calcium in the bloodstream. When tumours are present in the body, certain naturally occurring body chemicals can be over-produced and this can result in big disturbances within body systems. Certain chemicals can cause calcium to be drawn out of the bones. The calcium then circulates around the body in the bloodstream. At the same time calcium is prevented from being eliminated from the body through the kidneys and it can also be drawn out of food in the stomach at a greater rate than normal. All of these things combine to cause an increasing amount of calcium in the bloodstream. High calcium levels in the blood causes a wide range of symptoms that get progressively worse.

Signs of Hypercalcaemia

In most cases, the first signs of hypercalcaemia are:

- weakness and loss of strength.

This is followed by:

- thirst,
- nausea,
- constipation.

As calcium levels rise higher, these signs and symptoms get worse and the following problems also start to appear:

- increased urine output,
- itchy skin,
- vomiting,
- complete stoppage of the bowel,
- confusion and irritability, and/or
- changes in heart rate and rhythm.

If left untreated, the confusion associated with hypercalcaemia may get worse to the point where a person may become acutely agitated before progressing into a coma. The effect of high calcium on their heart rhythm can then lead to death.

The combination of symptoms associated with hypercalcaemia tend to get progressively worse. They can be prevented with early intervention and treatment. If you are concerned that the person in your care is starting to develop some or all of these symptoms, contact the nurse or doctor in your care team. They will organise a blood test to check their calcium levels.

Treatment of Hypercalcaemia

The current treatment options for hypercalcaemia are very safe and effective, and cause very few 'side' problems. They centre on:

- flushing the calcium out of the body (through the kidneys) via large volumes of fluids by mouth or infusion; and/or
- using medications that reverse the causes (mentioned previously) of calcium build-up in the bloodstream.

In most cases these simple treatments will correct the problem and the symptoms will go away. However the underlying things that caused the build-up of calcium may not have changed. Without ongoing treatment the problem may reoccur in a few weeks or a month.

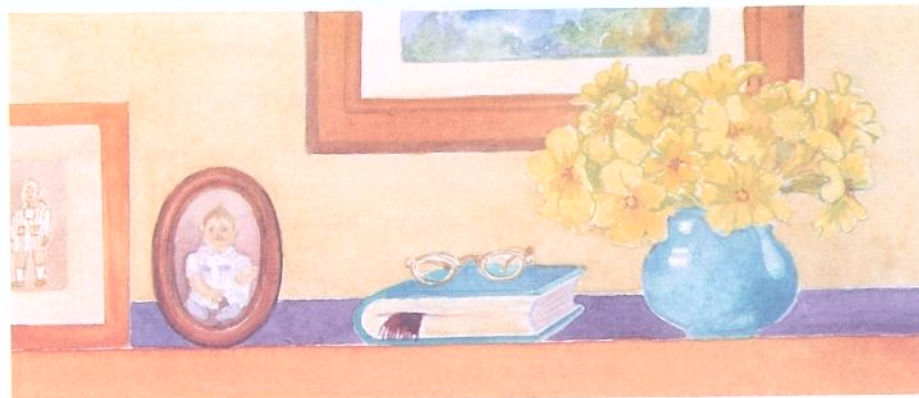
To prevent this, the following simple steps are usually taken:

- regular blood tests to monitor calcium levels;
- repeat doses of medications that reverse the causes (at the outpatient department or clinic); and/or
- the intake of lots of fluids each day.

You will not be expected to diagnose this problem on your own or left to feel responsible for its prevention. The members of your care team will be on the look out for all early signs and symptoms that suggest the level of calcium is building up in the person you are caring for.

Disclaimer

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This information should be read in conjunction with the advice provided by your palliative care team.