Acromegaly

Acromegaly occurs when a pituitary tumour makes too much growth hormone.

Growth hormone is normally required for growth during childhood. After puberty, too much growth hormone cannot make a person taller but it does result in enlargement of the soft tissues of the body, and causes a number of other medical problems which can result in ill-health if left untreated.

You may have noticed any of the following problems, which may have developed over many years:

- Hands and feet growing larger: Rings may be too tight and shoe size increased.
- Change in the appearance of the face, with coarsening of the features, prominent lower jaw and brow and a large tongue. (Look at old photos to see).
- Headaches, often severe and unexplained.
- Excessive sweating for no apparent reason.
- Problems with high blood pressure, diabetes and arthritis.
- Any of the symptoms of pituitary deficiency or pituitary enlargement (see Pituitary info sheet).

Dr Trevor A. Howlett

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Acromegaly is usually treated first by transsphenoidal surgery which lowers growth hormone levels very substantially in 70-80% of cases, and improves symptoms in rather more than this.

Effects of Acromegaly on General Health: A 'Safe' Growth Hormone Level

As well as its visible effects on your appearance, uncontrolled acromegaly also has a bad effect on your general health. We now know from several studies that uncontrolled acromegaly causes an increased chance of illness (and chance of dying) from a number of conditions including heart disease, respiratory problems and some types of cancer. *Luckily we also know that when growth hormone levels are restored to a 'safe' level then these risks are all returned to normal.*

A 'safe' level of growth hormone is now know to be an average level below 5mU/L - and we will be looking to achieve this in your case. We also aim to lower another long-term test called IGF-1 to normal. In Leicester, pituitary surgery achieves 'safe' levels in over 70% of cases with small pituitary tumours, but only 40% with larger tumours. If a safe level is not achieved, we will usually recommend treatment with tablets or injections, and may recommend pituitary radiotherapy.

In view of the increased risk of bowel cancer, we usually recommend a 'screening' colonoscopy (examining the bowel with a flexible telescope) at around age 50-55yrs to detect pre-cancerous polyps (this may well be recommended to the whole population soon - as it is in the USA). Like everyone else you should also take part in other cancer screening programmes for cervix, breast and prostate.

Octreotide & Lanreotide

Octreotide & Lanreotide are the most powerful drugs to control growth hormone levels - they act like the natural brain substance which switches off growth hormone. Both drugs need to be given by injection and are very expensive.

Traditionally octeotide was given by injection under the skin 3 times a day (similar to insulin in diabetes). However, longer-acting preparations of both drugs are now available which only need to be given every 2-6 weeks.

Because of the costs, we will often need to make special arrangements with your GP. Injections can be given in the hospital, in your GP's surgery or sometimes in your home.

Cabergoline

Cabergoline is a drug which lowers growth hormone in many patients with acromegaly, and in a few it can achieve 'safe' levels when given alone, or after pituitary surgery has improved (but not cured) the elevation of growth hormone.

We have used cabergoline in acromegaly since 1994, and found that the most effective dose is one tablet (0.5mg) daily. A similar drug called bromocriptine was widely used for 20 years before the availability of cabergoline (which is much better tolerated than bromocriptine).

If cabergoline is effective then most people feel very well taking it.