

Multiple Pituitary Hormone Deficiency

Series N.11



Patient's Guide

Easy Readability Leaflet

Multiple Pituitary Hormone Deficiency - Series 11 (Revised August 2006)

This leaflet was produced by Fernando Vera MSc and Prof Gary Butler at the Institute of Health Sciences, University of Reading, Reading, UK (August, 2006). Some portions of the text were extracted or modified from the Growth and Growth Disorders Booklet Series (Third edition, 2000)* and may be used in conjunction with these as they provide a choice of leaflets providing the same information, but for people of different ages and reading abilities. The numbering sequence in each series is the same for easy cross-reference. The original leaflet series can be also obtained from the links given at the end.

All illustrations were created and produced by Fernando Vera MSc.

This leaflet is part of the Hormone Disorders Leaflet Series. The following are also available:

- Series N 3.** Puberty and the Growth Hormone Deficient Child.
- Series N 4.** Precocious Puberty
- Series N 5.** Emergency Information for Children with Cortisol and GH Deficiencies and those Experiencing Recurrent Hypoglycaemia.

- Series N 6.** Congenital Adrenal Hyperplasia
- Series N 7.** Growth Hormone Deficiency in Young Adults.
- Series N 10.** Constitutional delay of growth and puberty
- Series N 11.** Multiple Pituitary Hormone Deficiency
- Series N 12.** Diabetes Insipidus
- Series N 13.** Craniopharyngioma
- Series N 14.** Intrauterine Growth Retardation or Small Gestational Age
- Series N 15.a.** Hyperthyroidism
- Series N 15.b.** Hypothyroidism
- Series N. 16.** Type 2 Diabetes and Obesity

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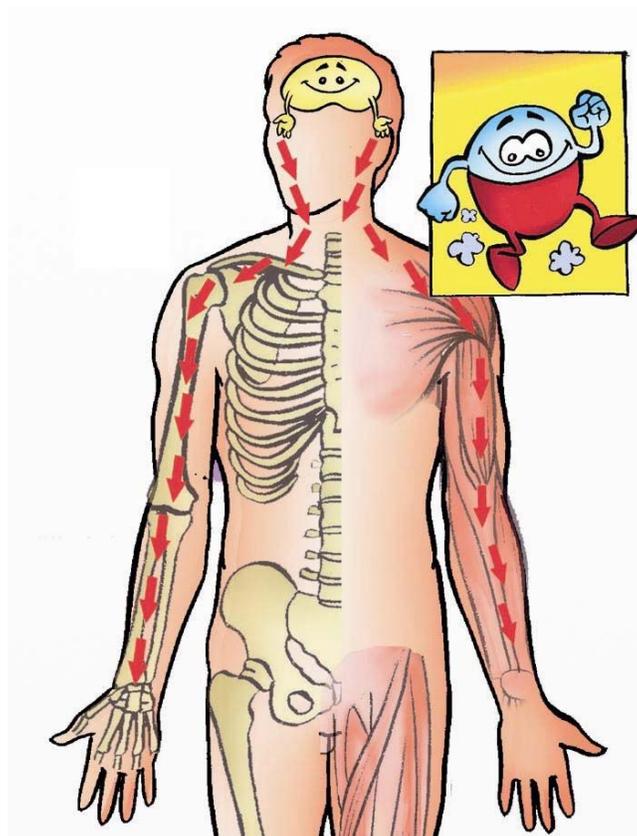
*Written by Dr Richard Stanhope (Gt. Ormond Street/Middlesex Hospital, London) and Mrs Vreli Fry (Child Growth Foundation)

Hello!

Today we'll tell you about **Multiple Pituitary Hormone Deficiency** or **MPHD**. You may think that it sounds a bit difficult, but do not worry! We'll tell you what it means, why it happens and how doctors treat it.

But first, let's talk a bit about your body...

The brain is a very important organ in your body. The brain acts like the "boss" by telling the body when it's time to grow, eat and sleep. It does this by making and sending messengers to the rest of the organs. These messengers are called **hormones**.



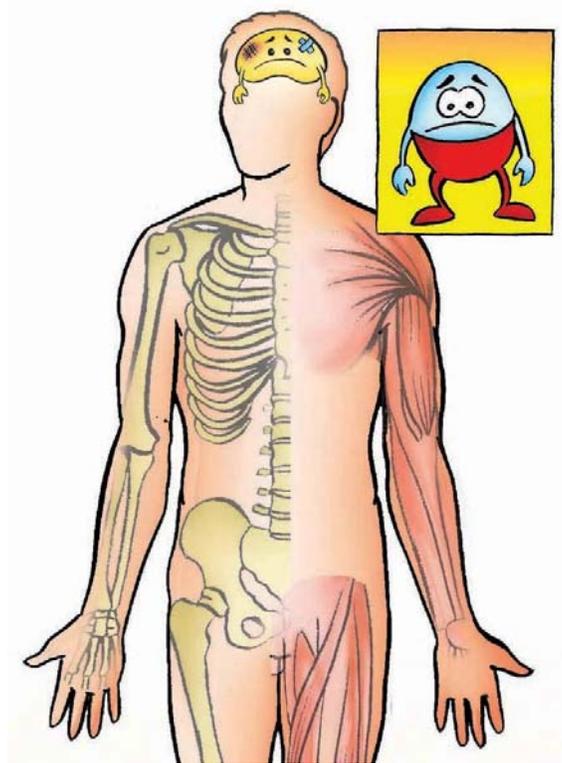
WHAT IS MPHD?

MPHD happens when the brain fails to make enough amounts of more than one hormone. These may include some or all of the following hormones:

- Hormones for body growth.
- Hormones for puberty and teenage growth.
- Hormones to keep you warm and help you learn.
- Hormones to help keep a sugar levels right.
- Hormones to help keep the right amount of water in your body.

Why does this happen to children?

Doctors say MPHD happens when some parts in the brain don't work very well. As a result, the brain cannot make some of the hormones the body needs.



Usually the first hormone that begins to fail is the growth hormone. Sometime after, the rest of hormones may start to fail as well. In some people, this failure happens all at once, but in others this loss may take months or years.

How is MPHD treated?

As you already know, MPHD results when the brain fails to make enough amounts of various hormones. Doctors treat this by giving you special medicines. These medicines contain the hormones that your body is lacking. These could include some or all of the following hormones:

- **Growth hormone:** This hormone helps your body to grow. If you have low amounts of this hormone, you may not grow as fast or as tall as your mates. Doctors will treat this by giving you an injection. It's given with a very fine needle, so it won't hurt!
- **Hormones for puberty and teenage growth** These hormones help your body to grow and develop when you are a teenager. This treatment is only given after childhood. It can be in tablets, injections, skin patches and gels.

- **Hormones to keep you warm and help you learn:** These hormones help your body keep warm and learn. If you have too little of this hormone, you may feel sick. Treatment for this is a daily tablet.
- **Hormones to help keep a sugar balance:** These hormones help to keep the right amount of sugar in your blood. If you have too little of this hormone, you may feel very weak and sick. Treatment for this is tablets two or three times a day.
- **Hormones to help keep a water balance:** These hormones are in charge of telling the organs when to hold or when to get rid of water by making you go to the toilet. If you have too much or too little of this hormone, you may feel sick due a water shortage! Treatment for this is tablets or nose sprays two or three times a day.

How is MPHD predicted in children with growth hormone deficiency?

As already mentioned, the first hormone to fail is the growth hormone. After this and only in some children, other hormones will fail as well. Doctors will do some tests, to see if this could happen to you. These tests are the following:

- Head x-ray: This test is just a picture of your head.
- Brain scan: Better than an x-ray, this special camera lets doctors see images of your brain (don't worry this doesn't hurt!)

These tests may have to be done every few months or years. You will not need to stay at hospital very long for these tests.

Congratulations!

Now you know about MPHD, why it happens and how it's treated. If you have not understood some things in this leaflet, don't feel shy to ask your doctor or other friendly people in the hospital. They will happily explain these or any other doubts you may have.

