

**PROSTATE CANCER**  
**Hormone Treatment**

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## **What is hormone treatment?**

Hormones are "chemical messengers" that are carried by the blood to act on target organs to produce effects distant from their point of origin. One of these is the male hormone **testosterone**. We know prostate cancer depends on this hormone for its growth. By reducing or blocking the action of this hormone we are able to treat and shrink the cancer, but not cure the cancer. This is called "hormone manipulation".

### **You may be treated with hormone treatment: -**

1. Prior, during and for a period of time after radical radiotherapy.
2. If you have prostate cancer that has advanced outside the prostate gland.
3. If you are not suitable to undergo radical prostatectomy or radical radiotherapy.

## **Types of hormone manipulation treatment**

Initially there are three ways of doing this: -

### **1. Surgery (orchidectomy or subcapsular orchidectomy).**

A fairly straightforward operation in which the testicles that produce the hormone testosterone are removed completely or reduced in size.

### **2. Tablets (anti-androgens) which block the action of testosterone**

Tablets may be prescribed on their own or to compliment the action of the injection or surgery. The tablets block the action of testosterone on prostate cancer cells. Some of the tablets prescribed are: -

- Cyprostat (Cyproterone Acetate)
- Drogenil (Flutamide)
- Casodex (Bicalutamide)

### **3. Injections - which stop the production of testosterone by the testicles.**

Injections act on the pituitary gland, stopping the release of the hormone that sends signals to the testicle to produce testosterone.

Initially, the injection may cause an increase in testosterone and this may result in worsening of symptoms (called tumour 'flare'). This is avoided by taking anti-androgen tablets during the first 2 weeks of treatment.

The injection is given as a one or three monthly depot under the skin in your abdomen by your GP/Practice Nurse or in your own home by the District Nurse. The injections in use are: -

|         |           |               |
|---------|-----------|---------------|
| Prostap | 3.75 mgs  | monthly       |
| Or      | 11.25 mgs | three monthly |
| Zoladex | 3.6 mgs   | monthly       |
| Or      | 10.8 mgs  | three monthly |

Your Consultant will discuss the best type of hormone treatment for you. They are equally as effective as each other, but the side effects are different.

### **Side effects of hormone manipulation treatment**

Unfortunately, hormone manipulation treatment can cause several side effects; in most men these are minor. The side effects are reversible if you stop having the injections or taking the tablets. They are **not** reversible after surgery (orchidectomy).

#### Injection or Surgery

Common side effects include inability to get an erection, loss of sex drive, infertility, hot flushes, feeling tired, breast swelling and tenderness. In the longer term a decrease in muscle mass and bone density may be observed.

#### Tablets

Potency and sexual desire may be maintained if you are having no other hormone therapy. Undesirable side effects may include hot flushes, nausea, diarrhoea, feeling tired, breast swelling and tenderness and problems with your liver.

If any of the above are particularly troublesome, please let your doctor know.

**Follow-up**

You will be reviewed regularly by your Consultant Urologist to make sure you are responding to this form of treatment.

You will have regular blood tests including PSA (Prostatic Specific Antigen).

**WHERE HELP IS AVAILABLE: -**

- Consultant Urological Surgeon  
Mr G.B. Boustead
- Uro-Oncology Nurse Specialists- **01438 781521**  
Helen Stoker  
Anne Bradley  
Linda Fowler

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04/07/2008