

## LHRH Analogues for Endometriosis Shared Care Protocol

### Introduction

The aims of treatment of endometriosis are to relieve symptoms and improve fertility (if pregnancy is desired). Treatment can be either surgery, dividing adhesions or ablating endometriotic tissue, or may be medical, using drug therapy to inhibit growth of endometriotic tissue by opposing the effects of oestrogen. Drug treatment may be with GnRH analogues e.g. goserelin, low dose oral contraceptives, danazol, or progestogen treatment.

### Therapeutic Use

LHRH analogues induce a hypo-oestrogenic state by paradoxically inhibiting FSH and LH release. In the management of endometriosis, it alleviates the symptoms, including pain, and reduces the size and number of endometrial lesions. Goserelin is at least as effective as danazol in reducing endometriotic deposits and in relieving the subjective symptoms of endometriosis. There were also significantly fewer withdrawals from treatment due to side effects with goserelin than danazol (Shaw 1992, Rock et al 1993).

### Presentation and availability

There are four LHRH analogues available:- Goserelin (*Zoladex*)- injection, Nafarelin (*Synarel*)- nasal spray, Leuprorelin (*Prostap*) - injection and Buserelin (*Suprecur*)- nasal spray and injection.

### Cost

A course of Goserelin injections costs £734, cf. a course of nafarelin nasal spray costing £636.

### Dosage and Administration

One depot (3.6mg goserelin) should be injected subcutaneously into the anterior abdominal wall every 28 days for a period of up to six months only. Nafarelin is used one spray twice daily or as directed by the Consultant. *For more information regarding doses and administration see BNF.*

***Repeat courses may only be used under the supervision of a Consultant and should not be started in primary care.***

**Note:** The training needs of practice personnel administering LHRH injections must be determined.

### Side-Effects

Hot flushes, sweating, loss of libido, headaches (more common with the nasal spray), mood changes (including depression) vaginal dryness and changes in breast size are the most common side-effects due to oestrogen deficiency. *A full list of potential adverse effects is given in the BNF.*

### Drug Interactions

There are no recognised drug interactions with the LHRH analogues other than Danazol (see BNF).

### References

- Rock, JA, Truglia, JA, Caplan, RJ et al. Zoladex (Goserelin Acetate Implant) in the Treatment of Endometriosis: A Randomised Comparison with Danazol. *Ostet Gynecol* 1993;82(2):198-205.
- Shaw, RW. An Open Randomised Comparative Study of the Effect of Goserelin Depot and Danazol in the Treatment of Endometriosis. *Fertil Steril* 1992;58(2):265-272.
- Drug & Therapeutics Bulletin* 1993 Vol 16 No. 6
- British National Formulary No. 39 March 2000 Section 6.7.2
- Data Sheet Compendium 1999-2000.

### Monitoring

No monitoring is required during treatment other than tolerability of side-effects. With patients using Danazol, counselling should include warnings about voice changes, which should it occur, to refer immediately to the GP and/or Consultant.

Hormone Replacement Therapy (HRT) as add-back treatment may be recommended for those patients at high risk of osteoporosis, intolerant of side-effects of treatment, or receiving repeat courses. Premarin 0.625mg or Tibolone 2.5mg daily may be used.

### **Aspects of Care for which Hospital Responsible**

- Recommendation of treatment options to GP following patient referral
- Provision of prescribing advice and support to GPs
- Reporting of adverse events to CSM

### **Aspects of Care for which GP Responsible**

- Prescribing and administration of LHRH analogue to patient under hospital guidance
- Reporting of adverse events to Consultant & CSM
- Reporting to and seeking advice from the Gynaecology department on any aspect of patient care which is of concern to the GP and may affect disease treatment.

### **Aspects of Care for which Patient Responsible**

- Report any adverse effects whilst receiving LHRH analogues to their GP
- To ensure they have a clear understanding of their treatment

### **Availability of Back-up Advice and Support**

Walsall Manor Hospital 01922-721172

Consultant Gynaecologists Contact through switchboard

Drug Information/Interface Pharmacist 01922-656610

These guidelines have been written in collaboration by the Walsall Manor Hospital NHS Trust and Pharmacy Department

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### **Other Useful Contacts**

The National Endometriosis Society  
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0171-2222776

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W8 6AU  
0181-7803007

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27 Sussex Place  
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