SHARED CARE PRESCRIBING GUIDELINE

MODAFINIL

DOCUMENT DETAILS

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Relevant external law, regulation, standards	
Comments on this document to:	Clinical Governance Pharmacist c/o Pharmacy Department, Guy's Hospital

CHANGE HISTORY

Date	Change details	Approved by
October 2011	Changes made based on feedback from Lambeth PCT	

Modafinil
Narcolepsy

NOTES to the GP

The information in the shared care guideline has been developed in consultation with Primary Care and it has been agreed that it is suitable for shared care.
This document should provide sufficient information to enable you to make an informed decision regarding the clinical and legal responsibility for prescribing this drug.

The questions below will help you confirm this:

- Is the patient's condition predictable or stable?
- Do you have the relevant knowledge, skills and access to equipment to allow you to monitor treatment as indicated in this shared care prescribing guideline?
- Have you been provided with relevant clinical details including monitoring data?

If you can answer YES to all these questions (after reading this shared care guideline), then it is appropriate for you to accept prescribing responsibility.
If the answer is NO to any of these questions you should contact the requesting consultant or your local PCT medicines management team. It would not normally be expected that shared care prescribing would be declined on the basis of cost.

Prescribing should follow requirements in the South East London Interface Prescribing Policy
The doctor who prescribes the medication legally assumes clinical responsibility for the drug and the consequences of its use. The patient's best interests are always paramount

Date shared care guideline prepared: July 2008 then updated Aug 2010 **Approved by:** Medicines Management Committee. Lambeth & Southwark PCT 31 Oct 2011 **Approved by D&T or equivalent Date approved:** 10 Nov 2011 **Review date**: Nov 2013	**Prepared by:** Dr Chris Kosky (Consultant Physician, Sleep Centre) Gráinne d'Ancona (Principal Pharmacist, Acute Medicine)

REQUEST FOR SHARED CARE

Consultant Name:	**Patient name:**
Consultant signature:	**Hospital Number:** **NHS Number:**
Date completed:	**D.O.B**
GP Name	**Diagnosis/Indication**

ACTION

HOSPITAL:

- Email/Fax completed shared care guideline to GP for attention and action
- F**ax details for GPs** can be found **www.nhs.uk/**
- Original to be filed in Patient's clinical record

GP PRACTICE:

- Please consider request within 2 weeks
- If named GP is not available over the next week pass request to a GP colleague.
- **If agree** to request initiate prescribing as detailed in shared care guideline. Confirmation to the requesting consultant is not required, it will be assumed after 2 weeks.
- **If do not agree** to request contact consultant or local PCT medicines management team within 2 weeks of receipt to discuss. If after discussion it is agreed not to undertake shared care for this patient, both the consultant and the local PCT Medicines Management team should be informed.
- Once decision reached file copy in patient's notes.

Attach patient addressograph

Modafinil

This medicine is monitored intensively by the CHM and MHRA

1. CIRCUMSTANCES WHEN SHARED CARE IS APPROPRIATE

- Prescribing responsibility will only be transferred when the consultant and the GP are in agreement that the patient's condition is stable or predictable.
- The hospital will provide the patient with a supply of therapy until the patient is stable.

2. AREAS OF RESPONSIBILITY

Consultant	GP

▪ Establish or confirm diagnosis of narcolepsy and assess patient suitability for treatment
▪ Baseline monitoring
  ▪ Epworth Sleepiness score
  ▪ Blood pressure
  ▪ Ensure patient is not pregnant
  ▪ ECG
▪ Discuss treatment with patient and ensure they have a clear understanding of it.
▪ Discuss with the patient that they should not become pregnant while taking modafinil (the effectiveness of steroidal contraceptives may be reduced, so alternative or concomitant methods of contraception should be used). Patients should remain on a contraceptive for 2 months after discontinuing treatment. Modafinil is contra-indicated in breastfeeding. This discussion should be documented in the patient's medical records
▪ Email/Fax a signed shared care guideline with patient details completed to GP for consideration of shared care request
▪ Initiate treatment and provide a minimum of 2 weeks supply to the patient.
▪ Prescribe and monitor treatment according to local guideline or formulary until patient's condition is stable or predictable
 	
After agreement to shared care
▪ Inform GP when patient is stable
▪ Inform GP of abnormal monitoring results and any changes in therapy
▪ Evaluate adverse events reported by GP or patient
▪ Carry out ongoing monitoring and follow up accordingly to shared care guidelines including continued need for therapy.
	▪ Consider shared care proposal within 2 weeks of receipt
	▪ If agreement to shared care take over prescribing responsibility. Confirmation to the requesting consultant is not required, it will be assumed after 2 weeks.
	▪ If do not agree to shared care discuss with requesting consultant or local PCT medicines management team within 2 weeks of receipt of shared care request
	
	After agreement to shared care
	▪ Prescribe dose as recommended once the patient's condition is stable or predictable
	▪ Monitor general health of patient and check adverse effects as appropriate
	▪ Inform specialist consultant of suspected adverse effects and also report via yellow card scheme if necessary
	▪ Stop treatment on advice of specialist or immediately if urgent need arises
	▪ Check compatibility interactions when prescribing new or stopping existing medication
	▪ Carry out monitoring and follow up according to shared care guideline
	▪ Contact consultant if patients blood pressure >160/90mmHg or if there are concerns regarding the modafanil
	▪ Only ask specialist to take back prescribing should unmanageable problems arise. Allow an adequate notice period
	▪ Caution is required when using modafinil in patients with a history of major anxiety, psychosis, depression, mania or alcohol/drug/illicit substance abuse. Please ensure you make the consultant aware of such diagnoses
	▪ Modafinil can alter the activity of the cytochrome P450 system, thus interacting with other medicinal products metabolised by this route. Please refer to the SPC (section 4.5) for further information

3. PATIENTS RESPONSIBILITIES (add specific additional responsibilities where applicable)

- Take medicines as agreed
- Report any adverse effects to GP or hospital doctor
- Do not share medicines
- While this product does not require any special storage conditions, it should be kept safely out of reach and sight
- Discuss the possibility of becoming pregnant before attempting to do so

4. COMMUNICATION AND SUPPORT

Hospital contacts:

SLEEP DISORDERS CENTRE
St. Thomas's Hospital, Lambeth Palace Road, SE1 7EH
Tel: 0207 188 3430
Fax: 0207 188 6114

Specialist Consultant physicians :
Prof Adrian Williams:
Adrian.Williams@gstt.nhs.uk
Dr Chris Kosky:
Chris.Kosky@gstt.nhs.uk
Dr Rexford Muza:
Rexford.Muza@gstt.nhs.uk
Dr Guy Leschziner;
Guy.Leschziner@gstt.nhs.uk
Dr Joerg Steier
Joerg.Steier@gstt.nhs.uk

Attach patient addressograph

Modafinil

5. CLINICAL INFORMATION[1]

Indication:	Narcolepsy
Place in Therapy:	Modafinil is first line therapy for narcolepsy (see appendix 1)
Dose & route of administration:	The recommended daily dose for sleepiness due to narcolepsy is 200–400 mg orally, where therapy is commenced at 200 mg and titrated according to clinical response over a number of weeks. This is usually taken as a single dose in the morning, but the patient may prefer to split the regimen with the second dose taken before 12pm.
Duration of treatment	Life long, if effective and tolerated
Criteria for stopping treatment	▪ Significant adverse drug reaction (eg patient develops rash or psychiatric disturbance - see appendix 2 and 3) ▪ Lack of efficacy ▪ At request of patient ▪ Concerns that modafinil is being abused
Monitoring Requirements including frequency:	**Consultant:** ▪ Epworth Sleepiness score ▪ Blood pressure ▪ Ensure patient is not pregnant or breast feeding **GP:** ▪ Modafinil is contraindicated in patients with uncontrolled moderate -

	severe hypertension (BP>160/100mmHg) or arrhythmia. ▪ Patients with controlled hypertension should have their blood pressure and heart rate measured every 6 months to ensure continued control. ▪ Contact consultant if patient's blood pressure greater than 160/100mmHg. ▪ Keep specialist informed of any adverse reactions or requirements to stop treatment. ▪ Modafinil should be discontinued and *not restarted* in patients at the first sign of a rash (majority of cases occur within 5 weeks of starting therapy, only isolated cases have been reported up to 3 months after initiation) or those who experience any psychiatric symptoms. Please see the MHRA warning in appendix 2. The MHRA should be informed of any adverse drug reactions via the Yellow Card reporting scheme
Follow up arrangements	**Consultant**: 1 month after initiation for a dose titration and tolerability review, then every 3 months for one year, then every 6-12 months **GP**: No additional follow up necessary, beyond usual GP care
Practical issues including other relevant advice/information:	Advise patient on potential unwanted side-effects of modafinil: ▪ The most common is headache, which is experienced by ~21% patients) ▪ Rash – patient should be advised that treatment should be stopped immediately and medical attention sought as soon as possible (see appendix 2 and 3) ▪ Undesirable effects such as blurred vision or dizziness might affect the patient's ability to drive and affect between 1/100 and 1/10 patients ▪ Side effects of modafinil are regularly audited by the sleep disorders centre.
Information provided	No additional information.
Evidence Base for treatment and Key references:	See Appendix 1.

NB: for full details of adverse effects and drug interactions refer to latest Summary of Product Characteristics

Appendix 1. ADDITIONAL INFORMATION

What is Narcolepsy?

Narcolepsy is a chronic neurological disorder characterised by an irresistible urge to sleep. In addition there maybe REM sleep instability with vivid dreaming, hypnogogic hallucinations, sleep paralysis, dream enactment (REM sleep behaviour disorder) and cataplexy. Cataplexy is the loss of muscle tone with some emotions (commonly laughter). Cataplexy can be mild with buckling of knees and head bobbing or may result in the patient falling.

Narcolepsy usually begins in adolescence or early adulthood and is life long. Most patients require medication. The treatments of choices in the UK for the management of excessive daytime sleepiness from narcolepsy are dexamphetamine and modafinil.

Modafinil-place in therapy
Modafinil is a is a wake promoting medication. Although its mechanism of action is unknown it is the first-line therapy for narcolepsy for several reasons. First, it is long acting; second, studies have shown a low abuse potential; third, unlike other stimulants it has been studied in double-blind placebo-controlled studies and found to be efficacious.(3) The drug is usually started at 100-200mg in the morning. It can be titrated up to 400mg mane. Occasionally the dose is split 100-200mg mane and 100-200mg midday if afternoon sleepiness is problematic. A three point reduction on the Epworth Sleepiness Scale would be considered as a response to treatment.

If Modafinil fails to control sleepiness the amphetamines are used or added.

Driving

The patient is obligated by law to notify the Driver and Vehicle Licensing Agency (DVLA) of the diagnosis of Narcolepsy. Group one licence holders (car, motorbike) must cease driving on the diagnosis of the narcolepsy. Driving will be permitted when satisfactory control of symptoms is achieved, then 1, 2 or 3 year licence with medical review, till 70 years of age. Licence restored after 7 years of satisfactory control. Group two licence holders (LGV/PCV) are generally considered unfit to drive this class of vehicle permanently. However, if a long period of symptom control has been established, licensing may be considered on a individual basis.

Summary of clinical trial data

Narcolepsy [2]

- Five randomised placebo-controlled, double blind trials (3 cross-over studies and 2 parallel studies) and one non-comparative open-label trial. All five trials used daily modafinil doses ranging from 200-400mg which is the licensed recommended daily dose.
- The duration of the five RCTs ranged from 6-9 weeks (total n = 689). The non-comparative open-label trial ran for 6 weeks (n = 151).
- The main endpoints were patients' subjective assessments of sleepiness, clinician's assessment of illness, and objective assessment of sleep latency – all measured using standard scales and tests.
- The 3 cross-over studies reported significantly greater reductions in the number and duration of daytime sleep episodes for modafinil compared to placebo ($p<0.05$).
- The 2 parallel studies reported significantly greater improvements in sleep latency and clinician's assessments compared with placebo ($p<0.001$). In one of these studies sleepiness returned to at least pre-treatment levels, two weeks after discontinuing modafinil.
- Open-label extensions of some of these RCTs (up to 40 weeks) suggested that improvements in sleep latency and sleepiness persisted were maintained.
- The non-comparative open-label trial assessed patients who had previously failed treatment with psychostimulants. Modafinil significantly reduced sleepiness and the clinician's assessment of improvement was significant and maintained during the study period.
- Modafinil has been shown to be generally well tolerated over the longer term in patients with narcolepsy (mean duration of treatment 22.4 months).

References

1. Modafinil SPC: http://www.medicines.org.uk/EMC/medicine/11337/SPC/Provigil+100+mg+Tablets%2c+Provigil+200+mg+Tablets/
2. Midlands Therapeutics Review and Advisory Committee (November 2005) Modafinil for the treatment of excessive daytime sleepiness associated with narcolepsy. VS05/19.
3. Dauvilliers Y, Arnulf I, Mignot E. Narcolepsy with Cataplexy. The Lancet. 2007; 369: 499-511.

Appendix 2:

MHRA ALERT – Drug Safety Update Vol 1, issue 8, Mar 2008 p5

Appendix 3:

EMA PRESS RELEASE ON THE RECOMMENDED RESTRICTION OF MODAFINIL INDICATIONS