NHS Herefordshire

# HEREFORDSHIRE SHARED CARE GUIDELINE FOR METHYLPHENIDATE IN ADHD (**ADULTS**)

## Introduction

Pharmacological interventions are indicated in young people and adults who have severe, pervasive and impairing symptoms of Attention Deficit Hyperactivity Disorder (ADHD), or where other interventions have been unsuccessful and symptoms remain impairing. NICE Guidance considers pharmacological treatment as the first line treatment for adults with ADHD.

## MTRAC Statement (2002)

'Diagnosis of ADHD and continued monitoring of the need for treatment is difficult. Data on both the efficacy and safety of long term use of methylphenidate in ADHD are still limited. Initiation and stabilisation of methylphenidate treatment is therefore the responsibility of the specialist. Only once a patient has shown a response to treatment and the dose of methylphenidate has been stabilised is it appropriate for GPs to prescribe this drug within the guidance of an effective shared care arrangement'

## Shared Care

In its guidelines on responsibility for prescribing between hospitals and general practitioners (circular EL(91)127), the Department of Health has advised that legal responsibility for prescribing lies with the doctor who signs the prescription.

## Indication for Therapy

Methylphenidate is indicated for children aged 6-18 years as part of a comprehensive treatment programme for ADHD. ADHD is persistent and many young people with ADHD will go on to have significant difficulties in adult life. Methylphenidate is not currently licensed for initiation in adult patients but Primary Care will only be requested to take over prescribing of them in line with the NICE Guidelines CG72[1]. This guideline covers those who graduate from adolescent to adult services, the initiation in adult and adolescent patients who have stopped treatment but need to restart and also newly diagnosed patients who have previously not been treated.

## Treatment Aim

The aim of the Shared Care Protocol is to ensure the best use of primary and secondary care for the benefit of patients with Attention Deficit and Hyperactivity Disorders and their families. The protocol is in accordance with NICE guidance which states that treatment with methylphenidate should only be initiated by Psychiatrists with expertise in ADHD, but continued prescribing and monitoring may be performed by General Practitioners, under shared care arrangements with specialists.

## Dose

***Immediate release methylphenidate*** (available as generic): 5mg twice or 3 times a day (usually avoiding administration after 4pm) increased if necessary by 5 mg increments. The recommended maximum dose is 60mg per day in divided doses (see BNF for more detail).
If improvement in symptoms is not seen after appropriate dosage adjustments over a 1 month period the drug should be discontinued. Treatment should also be discontinued periodically (at least annually) to assess the child's condition.

## Preparation and Availability

Immediate release: 5mg, 10mg & 20mg tablets
Modified release: Medikinet XL capsules 10mg, 20mg, 30mg & 40mg (first line choice)
Concerta XL tablets 18mg, 27mg, 36mg
Equasym XL capsules 10mg, 20mg, 30mg

Modified release capsules (Medikinet XL / Equasym XL) may be opened and the contents sprinkled on a tablespoon of apple sauce, then swallowed immediately without chewing.
***Modified release preparations are not interchangeable and should be prescribed by brand***.

Modified release formulations may be considered for convenience, their pharmacokinetic profile, and improved compliance. Immediate release preparations should be considered if more flexible dosing is

required or during titration. If converting from immediate release methylphenidate to once daily dosing use the following guide:

| Current methylphenidate dose | Recommended dose of Medikinet XL |
|---|---|
| 5mg methylphenidate twice daily | 10mg once daily |
| 10mg methylphenidate twice daily | 20mg once daily |
| 15mg methylphenidate twice daily | 30mg once daily |
| 20mg methylphenidate twice daily | 40mg once daily |
| | **Recommended dose of Concerta® XL** |
| 5 mg methylphenidate three times daily | 18mg once daily |
| 10mg methylphenidate three times daily | 36mg once daily |
| 15mg methylphenidate three times daily | 54mg once daily (2x27mg tablets) |

***NB for full range of modified release doses see p3 cost section***

## Side Effects

- Dizziness, nervousness, drowsiness and headaches are commonly experienced upon initiation of therapy. Loss of appetite (some weight loss may occur) and insomnia may also occur. These are often mild and transient and may be controlled by a reduction in dose.
- Other adverse effects include: abdominal pain, nausea and vomiting (can be alleviated by taking dose with food), dry mouth, emotional lability, changes in blood pressure, tachycardia, palpitations, skin rash, itching or bruising.
- The MHRA has issued safety advice regarding methylphenidate[2] stating the benefits of methylphenidate continue to outweigh the risks when used to treat ADHD in children aged 6 years or older and adolescents. MHRA guidance recommends that patients should have careful ongoing monitoring during treatment and that the need for long-term treatment is re-evaluated at least yearly. In summary:
  - Treatment with methylphenidate should be supervised by a psychiatrist
  - Diagnosis should be made according to DSM-IV (Diagnostic and statistical Manual of Mental Disorders, 4th edition) criteria or ICD-10 (International Classification of Diseases 10th revision) guideline, and should be based on a complete history and evaluation and not solely on the presence of one or more symptom(s)
  - Patients should have rigorous pre-treatment screening, including a complete history and relevant examination (including psychiatric disorders or symptoms, cardiovascular status, height, and weight)
  - Patients should be monitored regularly during methylphenidate treatment, including: blood pressure and pulse; height, weight, and appetite; onset or worsening of psychiatric symptoms (such as depression, suicidal thoughts, hostility, anxiety, agitation, psychosis, or mania); and symptoms suggestive of heart disease (which should prompt specialist cardiac evaluation)
  - Treatment should be interrupted at least yearly to determine whether continuation is needed

## Pregnancy/Lactation

Limited experience – avoid unless potential benefit outweighs risk

## Interactions

- Can enhance anticoagulant effect of warfarin
- Can increase the plasma levels of some anticonvulsants (phenytoin, primidone, phenorbarbitone) and SSRI and tricyclic antidepressants
- Can exacerbate CNS adverse effects of alcohol (abstention advised)
- Should be used with caution with MAOIs and pressor agents (e.g. ephedrine)
- Concurrent use of methylphenidate and atomoxetine does not cause increased side effects of either drug

## Monitoring

**Pre-treatment** (by specialist team)

- Full mental health and social assessment including past and present psychiatric disorders or symptoms
- Full history and physical examination including family history of sudden cardiac death, unexplained death, cardiac disease or malignant arrhythmia. History of exercise syncope, undue breathlessness, cardiovascular symptoms
- Heart rate and blood pressure plotted on a centile chart

- Concomitant medicines
- Assessment for substance misuse or drug diversion
- Further investigations if there is a past medical history, indication of, or family history of cardiac disease or sudden death in a young family member
- Caution when prescribing for patients with underlying medical conditions that might be compromised by increased heart rate or blood pressure

**Ongoing Monitoring** to be done on a regular basis by the specialist team

| Parameter | Frequency of Monitoring | Action |
|---|---|---|
| Blood pressure & pulse | 6 monthly | Report findings to GP. Consider cardiac referral if sustained raised BP despite stopping methylphenidate |
| Weight | 6 monthly | Report findings to GP |
| New, or worsening of pre-existing, psychiatric symptoms eg depression, suicidal thoughts, hostility, anxiety, agitation, psychosis & mania | 6 monthly | Take appropriate action and report any dose adjustments/action to GP |

Patients developing palpitations, exceptional chest pain, unexplained syncope, dyspnoea or other symptoms suggestive of heart disease should undergo prompt specialist cardiac evaluation

**Prescribing Recommendations**

- Methylphenidate is a schedule 2 CD so prescribing quantities greater than 30 days duration is only recommended in exceptional circumstances and the reason for an extended supply documented
- Modified release preparations are not interchangeable and should be **prescribed by brand**
- Look out for signs of diversion, misuse and abuse of methylphenidate (MHRA guidance)
- If raised BP noted in general practice discuss with psychiatrist who may stop the medication for a few months to monitor if the BP returns to normal. If there is still a problem they should be referred for further investigation
- Development of new side effects (e.g. tics, seizures, mood changes, withdrawal, lack of spontaneity, aggression or suicidal ideation). Discuss these problems with the Psychiatrist

**Cost** (December 2010)
Immediate release tablets 10mg x 30 £6.50, 20mg x 30 £9.59
Modified release: Medikinet MR capsules x 28 10mg £20.18, 20mg £26.91, 30mg £31.39, 40mg £43.20
Concerta XL tablets x 30 18mg £31.19, 27mg £36.81, 36mg £42.45
Equasym XL capsules x 30 £25, 20mg £30, 30mg £35

**Contacts – back up advice and support**
For more information about ADHD please do not hesitate to contact CAMHS

| Contact Details | Phone | Fax | E-mail |
|---|---|---|---|
| CAMHS Consultants, The Linden Centre | 01432 378940 | 01432 378916 | |
| Dr Hester Womersley Consultant Psychiatrist | 01432 265123 | | |
| Dr R Pande Consultant Psychiatrist (Learning disability) | 01432 373206 | | |
| Medicines Information | 01432 364017 | | ruth.bader@wvt.nhs.uk |
| PCT Clinical Pharmacist | 01432 363964 | 01432 347660 | yvonne.coats@herefordpct.nhs.uk |

**References**


1. NICE Clinical Guideline 72 (2008) 'Attention deficit hyperactivity disorder: Diagnosis and management of ADHD in children, young people and adults' http://www.nice.org.uk/cg72
2. Drug Safety Update March 2009. MHRA Methylphenidate: updated guidance on safe and effective use in ADHD http://www.mhra.gov.uk/Publications/Safetyguidance/DrugSafetyUpdate/CON041211

# Shared Care Responsibilities

## Aspects of Care for Which the Consultant/Specialist is Responsible

| | Consultant/Specialist Responsibilities | Tick |
|---|---|---|
| 1 | Discuss benefits and side effects of treatment with patient | |
| 2 | Ask GP if they are willing to participate in Shared Care – issue letter | |
| 3 | Carry out any pre-treatment assessment or tests | |
| 4 | Initiate treatment and provide supplies until first review by Consultant/Specialist | |
| 5 | Provide the GP with a summary within 14 days of outpatient review or inpatient stay | |
| 6 | Clarify place of drug in patients current therapy | |
| 7 | Review the patient's condition and monitor the response to treatment every 6 months | |
| 8 | Advise GP when to stop treatment | |
| | Ensure clear arrangements for GP back-up, advice and support | |
| | | |
| | | |

## Aspects of Care for Which the General Practitioner is Responsible

| | GP Responsibilities | Tick |
|---|---|---|
| 1 | Reply to the request for Shared Care within 14 days of request | |
| 2 | Prescribe methylphenidate under the guidance of the Consultant and up to 30 days duration in line with CD good practice recommendations | |
| 3 | Report any suspected adverse reactions to the Consultant | |
| 4 | Monitor and record adherence to therapy in line with practice policy and in accordance with the Shared Care Guideline where appropriate | |
| 5 | Liaise with the hospital Consultant regarding any complications of treatment | |
| 6 | Stop treatment on advice of the Consultant | |
| | | |

## Patient Responsibilities

| | Patient Responsibilities | Tick |
|---|---|---|
| 1 | Read information provided and give consent for the chosen treatment | |
| 2 | Inform Consultant and GP of any other medication they may be taking or start taking during treatment, including over the counter medicines or herbal remedies. | |
| 3 | Store and handle the medication safely | |
| 4 | Keep any patient held records safe | |
| 5 | Takes prescribed medication | |
| 6 | Reports any side effects to GP or Consultant. | |
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