

## SHARED CARE GUIDELINES

### Methylphenidate for ADHD in Children and Adolescents

It is vital for safe and appropriate patient care that there is a clear understanding of where clinical and prescribing responsibility rests between Consultants and General Practitioners (GPs).

This guideline reinforces the basic premise that:

- When clinical and / or prescribing responsibility for a patient is transferred from hospital to GP, the GP should have full confidence to prescribe the necessary medicines. Therefore, it is essential that a transfer of care involving medicines that a GP would not normally be familiar with, should not take place without the “sharing of information with the individual GP and their mutual agreement to the transfer of care.

These are not rigid guidelines. On occasions, Consultants and GPs may agree to work outside of this guidance. As always, the doctor who prescribes the medication has the clinical responsibility for the drug and the consequences of its use.

**Licensed indication:**

Methylphenidate is licensed for the treatment of attention-deficit hyperactivity disorder (ADHD) for children over 6 years as part of a comprehensive treatment programme. It can be used in children less than 6 years of age off license. Treatment must be under the supervision of a specialist in childhood behavioural disorders.

**Dosage and administration:** Methylphenidate immediate release tablets are first choice treatment.

Methylphenidate dose range:

- 5mg to 60mg (maximum) per day in divided doses according to age and size. Recommended total dose 1 to 2mg per kg per day.
- The effects of each dose last up to, but seldom longer than, 4 hours. In some children, especially younger children, it may last an appreciably shorter time. It takes effect within half an hour after administration, peak effect 1½ to 2 hours later, after which effects rapidly decline. This creates a need for frequent dosage every 3 or 4 hours. Traditionally and most commonly administered around 8.00am and 12.00 noon, but in many cases parents opt for a third dose around 4.00pm.

*Note that increasing the dose does not prolong its effect. This is a common misunderstanding.*

Seven long-acting preparations, Xaggitin XL<sup>®</sup>, Xenidate XL<sup>®</sup>, Matoride XL<sup>®</sup>, Concerta XL<sup>®</sup>, Delmosart XL<sup>®</sup>, Equasym XL<sup>®</sup> and Medikinet XL<sup>®</sup> are available for once daily dosing. Xaggitin XL<sup>®</sup>, Xenidate XL<sup>®</sup>, Matoride XL<sup>®</sup>, Concerta XL<sup>®</sup> and Delmosart XL<sup>®</sup> cover a 12hour period and the dose range is 18 to 54mg. Equasym XL<sup>®</sup> is effective for 8hours with a dose range of 10 to 60mg. Medikinet XL<sup>®</sup> is effective for 8 hours with a dose range of 10 to 60mg. They can be used in the following situations:

- School children where problems of safety and compliance are important.
- Other children who are difficult to maintain on immediate release tablets. The decision to prescribe long-acting preparations should be taken by the consultant.

**Cautions and contraindications:** Methylphenidate is contra-indicated in children with marked anxiety; agitation or tension; hyperthyroidism; severe angina or cardiac arrhythmias; glaucoma; or thyrotoxicosis. Caution is required in children with epilepsy, a history of drug or alcohol dependence or symptoms or family history of tics or Tourette’s syndrome. Blood disorders including leucopenia and thrombocytopenia have been reported. For full information see current edition of the British National Formulary for Children (BNFc).

**Adverse effects:** For full information see current edition of BNFc.

**Monitoring requirements:**

Children treated with methylphenidate should have height and weight checked, recorded and plotted every 6 months. Blood pressure should be checked annually. Routine blood tests are not needed. This monitoring should occur as part of the specialist clinic.

**Action to be taken if abnormal results/adverse effects:** In the event of any adverse effects the specialist clinic should write a management plan and this will be shared with primary care. If adverse events are detected in a primary care setting then the specialist should be informed as soon as possible.

**Drug interactions:** Methylphenidate may interact with anticonvulsants and tricyclic antidepressants. For full information see the current edition of BNFc.

**Specialist responsibilities:**

- Confirm the diagnosis of ADHD following full assessment, drawing upon information from all sources including diagnostic criteria such as DSM V and first hand observations of the child. Communicate details of the diagnosis to the GP.

2. Ensure baseline monitoring of height, weight, BP has been performed plus any additional relevant investigations. Communicate the results of this, and subsequent monitoring to the GP.
3. Decisions to initiate treatment should only be made by consultants or staff and associate specialists (SAS), or registrars under consultant supervision. We recommend that stimulant medications are only used under consultant or SAS grade supervision.
4. Trial methylphenidate for 1-2 months and discontinue if no response or significant adverse effects.
5. The primary purpose of review is to monitor efficacy of the treatment at least annually and consider whether continuation of treatment is appropriate.
6. Review patient at regular intervals, initially 6 to 8 weeks after starting medication. Children maintained on effective medication will be seen at least every 6 months and more frequently if needed.
7. Undertake any necessary monitoring at review appointments (height, weight, at least every 3 months for children under 10 years and 6 months for children 10 years or over, BP annually).
8. Arrange shared care with the GP once stabilised on medication.
9. Reach decision to recommend long-acting methylphenidate if appropriate.
10. Adjust treatment as appropriate such as varying dosage or timing, or use for a trial period. This would include periodic suspension of treatment to assess the child's condition.
11. Stop treatment when appropriate. In particular there will usually be a period without medication on leaving school. A plan should be formulated to stop treatment or refer to adult ADHD services upon transition from children's to adult-based service.
12. Maintain regular and prompt communications with primary care on each attendance.

**GP responsibilities:**

1. Initial referral to a Consultant Community Paediatrician or Consultant Child and Adolescent Psychiatrist raising the possibility of ADHD. It is the current guidance that referrals come through the school health service. If the GP is concerned, please refer to school nurses / SENCO to initiate the ADHD pathway.
2. Report any adverse effects of medication to consultant.
3. Provide the patient with monthly repeat prescriptions of medication once the specialist has recommended continuation therapy following the trial period. The patient should allow at least 48 hours for the prescription from the GP to be generated once they have agreed to take on prescribing.
4. Not to initiate or change the ADHD medication without referral to the Consultant.
5. Contact the specialist if they do not agree with the treatment recommendation, or if there is a perceived problem, compliance or concordance, or if they have any questions about the management plan.

**Patient and parent/carer responsibilities:**

- Agree to request prescriptions from the GP in good time; obtain the first GP prescription within 2 weeks of being informed that shared care will be in operation.
- Report any concerns or adverse effects to the GP, Paediatrician or Pharmacist.

**Secondary care review:** Patient's will be reviewed at regular intervals, initially 6 to 8 weeks after starting medication. Children maintained on effective medication will be seen at least every 6 months and more frequently if needed, or if requested to review by the GP.

**Availability:**

**For Primary care: See Script Switch for most cost-effective choice.**

Methylphenidate hydrochloride containing 5mg, 10mg and 20mg tablets available in packs of 30 tablets.  
 Concerta XL<sup>®</sup> tablets containing 18mg, 27mg, 36mg or 54mg of methylphenidate hydrochloride available in boxes of 30 tablets.  
 Delmosart XL<sup>®</sup> tablets containing 18mg, 27mg, 36mg and 54mg of methylphenidate hydrochloride available in boxes of 30 tablets.  
 Matoride XL<sup>®</sup> tablets containing 18mg, 36mg and 54mg of methylphenidate hydrochloride available in boxes of 30 tablets.  
 Xaggitin XL<sup>®</sup> tablets containing 18mg, 27mg, 36mg and 54mg of methylphenidate hydrochloride available in boxes of 30 tablets.  
 Xenidate XL<sup>®</sup> tablets containing 18mg, 27mg, 36mg and 54mg of methylphenidate hydrochloride available in boxes of 30 tablets.  
 Equasym XL<sup>®</sup> capsules containing 10mg, 20mg or 30mg of methylphenidate hydrochloride available in boxes of 30 capsules.  
 Medikinet XL<sup>®</sup> capsules containing 5mg, 10mg, 20mg, 30mg 40mg, 50mg or 60mg of methylphenidate hydrochloride available in boxes of 30 capsules.  
 For current prices, see [online BNF](#) .

<b>Back up advice and support:</b>	<b>Specialist</b>	<b>Telephone/Fax</b>	<b>Email address:</b>
Dr Vidya Raghavan	Consultant Community Paediatrician	0151 514 2506	vidya.raghavan@nhs.net
<b>Written By:</b> Neil Caldwell, Consultant Pharmacist, Children's Services.	Abigail Cowan, Medicines Optimisation Pharmacist - Medicines Management & Optimisation Team, MLCSU on behalf of Wirral CCG.		