

North of Tyne Area and Gateshead Area Prescribing Committee

# Methylphenidate

## Shared Care Guidance

Attention Deficit Hyperactivity Disorder (ADHD) in children and young people  
Giggle Incontinence in children aged 8 to 16 years

Introduction	<p><b>Indications</b></p> <p><b>ADHD:</b> Methylphenidate is a CNS stimulant drug used in the treatment of Attention Deficit Hyperactivity Disorder (ADHD). It should only be initiated following assessment and diagnosis by a specialist with expertise in ADHD, as part of a comprehensive treatment plan.</p> <p><b>Licensed (amber) Indications:</b> for use in children of 6 years and over. Use is supported by NICE CG 72 guidance and the Children’s British National Formulary (CBNF).</p> <p><b>Giggle Incontinence:</b> Methylphenidate has been approved by the APC as a third line option, where other treatments (which include antimuscarinics, imipramine, and pelvic floor exercises) have been unsuccessful. This is an <b>unlicensed (amber)</b> indication.</p> <p><b>Preparations:</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Immediate Release</th> <th style="text-align: left;">Modified Release</th> </tr> </thead> <tbody> <tr> <td>Ritalin® 10mg scored tablets</td> <td>Concerta XL® 18mg, 27mg and 36mg tablets ~ 12 hour effect</td> </tr> <tr> <td>Medikinet® 5mg, 10mg and 20mg scored tablets</td> <td>Equasym XL® 10mg, 20mg, 30mg capsules ~ 8 hour effect</td> </tr> <tr> <td></td> <td>Medikinet XL® 10mg, 20mg, 30mg and 40mg capsules ~ 8 hour effect</td> </tr> </tbody> </table> <p>Ritalin® immediate release tablets may be halved, Equasym XL® and Medikinet® modified release capsules may be opened to allow contents to be sprinkled on food. Concerta XL® tablets cannot be halved or opened.</p> <p><b>Dosage and administration:</b></p> <p><b>ADHD Children 6 – 17 years BNF 70 (BNFC 2015), NICE ADHD Clinical Guideline 2008</b></p> <p><b>Immediate release:</b> Initially 5 mg 1–2 times a day, increased in steps of 5–10 mg daily if required, at weekly intervals, increased if necessary up to 60 mg daily in 2–3 divided doses, increased if necessary up to 2.1 mg/kg daily in 2–3 divided doses, the licensed maximum dose is 60 mg daily in 2–3 doses, higher dose under the direction of a specialist, discontinue if no response after 1 month, if effect wears off in evening (with rebound hyperactivity) a dose at bedtime may be appropriate (establish need with trial bedtime dose). Treatment may be started using a modified-release preparation; maximum 90 mg per day.</p> <p><b>Modified Release:</b></p> <p><b>Concerta XL®</b> should be started at 18mg in the morning – increased if necessary by increments of 18mg at approximately weekly intervals. Patients already established on immediate release methylphenidate can be switched to Concerta XL® using the following equivalents:</p> <table style="width: 100%; border: none;"> <tr> <td style="padding-right: 10px;">5mg Methylphenidate three times daily</td> <td style="padding-right: 10px;">➔</td> <td>18mg once daily</td> </tr> <tr> <td style="padding-right: 10px;">10mg Methylphenidate three times daily</td> <td style="padding-right: 10px;">➔</td> <td>36mg once daily</td> </tr> <tr> <td style="padding-right: 10px;">15mg Methylphenidate three times daily</td> <td style="padding-right: 10px;">➔</td> <td>54mg once daily</td> </tr> </table> <p><b>Equasym XL®</b> should be started at a dose of 10mg in the morning before breakfast – increased if necessary by weekly increments of 10mg.</p> <p><b>Medikinet XL®</b> should be started in the morning with or after breakfast (otherwise release may not be adequately sustained).</p> <p>Patients already established on immediate release methylphenidate can be switched to the</p>	Immediate Release	Modified Release	Ritalin® 10mg scored tablets	Concerta XL® 18mg, 27mg and 36mg tablets ~ 12 hour effect	Medikinet® 5mg, 10mg and 20mg scored tablets	Equasym XL® 10mg, 20mg, 30mg capsules ~ 8 hour effect		Medikinet XL® 10mg, 20mg, 30mg and 40mg capsules ~ 8 hour effect	5mg Methylphenidate three times daily	➔	18mg once daily	10mg Methylphenidate three times daily	➔	36mg once daily	15mg Methylphenidate three times daily	➔	54mg once daily
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	<p>milligram equivalent daily dose of Equasym XL® or Medikinet XL® (eg. Methylphenidate 10mg twice daily is equivalent to 20mg of Equasym XL® once daily or 20mg of Medikinet XL® once daily).</p> <p>The dosage of modified release methylphenidate may be increased under the direction of a specialist to a maximum total daily dose of: Concerta XL up to 108mg; Equasym XL up to 90mg; Medikinet XL up to 90mg.</p> <p>In some cases, patients may require both a modified release and immediate release preparation for adequate control of symptoms.</p> <p><b>Giggle Incontinence Children 8-16 years</b></p> <p>The methylphenidate doses prescribed are 5 – 20mg daily, in divided doses, lower than the usual doses used in ADHD. Its use should be subject to a therapeutic trial to be reviewed after two months and considered for shared care if patients have been shown to respond after the trial period.</p> <p>Methylphenidate is a schedule 2 controlled drug and is therefore subject to normal controlled drug regulations.</p>
<p><b>Specialist Responsibilities</b></p>	<ul style="list-style-type: none"> <li>• Diagnose the condition and assess if the patient is suitable for treatment with methylphenidate (as per the pre-drug assessment in NICE guidance)</li> <li>• Provide patient/carer with relevant information on use, side effects and need for monitoring of medication</li> <li>• Arrange shared care with the patient’s GP when the patient has received at least 3 months treatment from the specialist team.</li> <li>• Provide the GP with relevant information for each patient, including:             <ul style="list-style-type: none"> <li>○ Treatment to be undertaken by GP (dose, any dosage titrations etc.)</li> <li>○ System of monitoring and recording of progress and side effects</li> </ul> </li> </ul> <p><b>Monitoring condition:</b></p> <ul style="list-style-type: none"> <li>• Assess response to treatment and the need to continue therapy by reviewing the patient at regular intervals during initiation and at least annually thereafter</li> <li>• Re-evaluate the need for continued therapy beyond 1 year, particularly when the patient has reached a stable and satisfactory response</li> </ul> <p><b>Monitoring side-effects:</b></p> <ul style="list-style-type: none"> <li>• Height every 6 months</li> <li>• Appetite&amp; weight: 3 and 6 months after starting treatment then 6 monthly</li> <li>• BP &amp; heart rate: Approximately every 3 months as per specialist’s review schedule, and with each dose change</li> <li>• Assess for: development of tics, psychotic symptoms, anxiety, or seizures</li> <li>• Advise discontinuation of methylphenidate if no improvement in symptoms is seen after a reasonable trial</li> <li>• Review the treatment regularly, sending a written summary to the GP whenever the patient is reviewed</li> <li>• Provide any other advice or information for the GP if required</li> <li>• Inform GP if failing to attend appointments</li> <li>• Supervise any discontinuation of treatment or onward referral to adult service if appropriate.</li> </ul>
<p><b>GP Responsibilities</b></p>	<ul style="list-style-type: none"> <li>• Prescribe methylphenidate - it is strongly recommended that prescriptions are issued for maximum treatment duration of one month, in line with good practice guidance for controlled drug prescribing.</li> <li>• Report significant deviations from the prescribing pattern to the specialist</li> <li>• Monitor and record the therapy in accordance with written directions of specialist</li> <li>• Report any adverse events to the specialist, and the usual bodies (e.g. MHRA).</li> <li>• Contact specialist if concerned about any aspects of the patient's treatment e.g. Failure to collect prescriptions</li> </ul>
<p><b>Adverse Effects, Precautions,</b></p>	<p><b>Contraindicated</b> in patients with:</p> <ul style="list-style-type: none"> <li>• Known intolerance of sympathomimetic amines</li> </ul>

<p><b>Contraindications</b></p>	<ul style="list-style-type: none"> <li>• Marked anxiety, agitation, tension or psychosis</li> <li>• Glaucoma</li> <li>• Hyperthyroidism</li> <li>• Current or recent (within 14 days) treatment with MAOI's</li> <li>• *Some cardiovascular disease – including hypertension</li> <li>• Motor tics, or family history of Tourette's syndrome</li> </ul> <p>*Although these two are listed as contraindications, in some circumstances, methylphenidate can be used with caution and careful monitoring by the specialist. Use with caution in epilepsy. If seizure frequency increases, the specialist should discontinue methylphenidate.</p> <p>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 effects are often mild and transient and may be controlled by a reduction in dose.</p> <p>Other adverse effects include: abdominal pain, nausea and vomiting (can be alleviated with concomitant food intake), dry mouth, emotional lability, temporary growth retardation, changes in blood pressure, tachycardia, palpitations, skin rash, itching or bruising Ability to drive safely may be impaired – warn relevant patients</p>
<p><b>Common Drug Interactions</b></p>	<p><b>Methylphenidate:</b></p> <ul style="list-style-type: none"> <li>• Can enhance anticoagulant effect of warfarin</li> <li>• Can increase the plasma levels of some anticonvulsants (phenytoin, primidone, phenobarbitone) and tricyclic antidepressants</li> <li>• Can exacerbate CNS adverse effects of alcohol (abstention advised)</li> <li>• Should be used cautiously with MAOIs and pressor agents (eg. ephedrine).</li> <li>• Concurrent use of methylphenidate and atomoxetine does not cause increased side effects of either drug.</li> </ul>
<p><b>Communication</b></p>	<p><b>ADHD Specialists</b> MON – FRI, 09:00 – 17:00                  Newcastle and Gateshead CYPS:- 0191 246 6913 (Benton House)                  North Tyneside CAMHS:- 0191 2196725 (Albion Road Clinic) 0191 200 7435 (Balliol Centre)                  Northumberland CYPS:- 01670 394 256 (Villa 9, Northgate)</p>

This information is not inclusive of all prescribing information and potential adverse effects.  
**Please refer to full prescribing data in the SPC or the BNF**

