# Memantine (TLS Amber with shared care) (Red in Wiltshire)

Shared Care Guidelines: For the treatment of Alzheimer's disease

It is intended to apply to patients who have been initiated on treatment, (and who have been assessed as benefiting) by specialist services experienced in the care of people with dementia (e.g RICE) in accordance with the guidance from the National Institute for Health & Clinical Excellence (NICE TA 217 and NICE Dementia Clinical Guideline 42)

**AREAS OF RESPONSIBILITY FOR THE SHARING OF CARE**

In BANES, GPs should refer appropriate patients (Appendix A) to RICE or AWP (see referral pathway Appendix B) for assessment within a specialist service. Where indicated, treatment should be initiated in secondary care. Secondary care services **should continue to prescribe for the first three months** while response is assessed. In referring patients, GPs should be willing to continue prescribing after the first three months, as part of a shared care arrangement, for those patients who have been assessed as benefiting.

*Drug treatment for Alzheimer's disease should form part of a wider package of support and information for the patient and their carer. Treatment with memantine should only be initiated if reasonable steps are taken to ensure adequate compliance.*

Sharing of care assumes communication between the specialist, GP and patient. The intention to share care is usually explained to the patient by the doctor initiating treatment. It is important that patients are consulted about treatment and are in agreement with it. Patients with the Alzheimer's disease are under regular specialist follow-up, which provides an opportunity to discuss drug therapy. **The doctor who prescribes the medication legally assumes clinical responsibility for the drug and the consequences of its use.**

**RESPONSIBILITIES and ROLES**

| | **Specialist responsibilities** |
|---|---|
| 1 | Diagnosis of probable or possible Alzheimer's disease (excluding other forms of dementia) and any appropriate assessments required. |
| 2 | Discuss the benefits and potential side effects of treatment with the patient and carer and provide information including the action to be taken should side effects occur |
| 3 | Confirm the patient's understanding & consent to treatment (discuss with carers' where patient lacks capacity) |
| 4 | Initiate treatment with memantine for patients with moderate to severe dementia in Alzheimer's Disease in accordance with the NICE TA217 and make any dose adjustments. |
| 5 | Provide at least 3 months supply or sufficient to stabilise patient. |
| 6 | Assess the patient after three months on stable medication and approach the GP (with a shared care agreement and form) with regard to continued prescribing if there is evidence of stabilisation using cognitive, global, functional and behavioural assessment. |
| 7 | Discontinue treatment after 3 months where there has not been benefit or where there has been a deterioration of the condition. If discontinuing treatment, care should be taken to phase out the medication gradually and monitor for a potentially significant deterioration of patient functioning or a worsening of behavioural symptoms |
| 8 | When treatment is to be continued after first assessment, a member of the specialist team will undertake a review of the patient if requested to do so by the GP. |
| 9 | Give advice to the GP on when and how to stop treatment |
| 10 | Ensure that clear backup arrangements exist for GPs to obtain advice and support |

| | **General Practitioner responsibilities** |
|---|---|
| 1 | It is recommended good practice for there to be a pre-referral assessment including physical examination and baseline blood tests (FBC, C&E's, LFT's, glucose, TFT's, B12, folate and calcium) in accordance with the "Memory assessment pathway" for primary care. |
| 2 | Refer appropriate patients to RICE or AWP Community Mental Health Teams (according to the referral pathway) |
| 3 | Reply to the request for shared care as soon as practicable. |
| 4 | Prescribe memantine at the dose recommended after the first three months for those patients who have been assessed as benefiting from treatment. |
| 5 | Refer promptly to specialist when any loss of clinical efficacy is suspected (e.g. worsening of disease-related symptoms, new symptoms suggestive of disease recurrence or progression) or intolerance to therapy occurs. GPs would not be expected to alter dose unless advised by specialist. |
| 6 | Report to & seek advice from the specialist on any aspect of patient care that is of concern to the GP |
| 7 | Stop treatment on the advice of the specialist. |
| 8 | Report adverse events to the specialist and MHRA. |

| Patient's role | |
|---|---|
| 1 | Report to the specialist or GP if he or she does not have a clear understanding of the treatment. |
| 2 | To attend hospital & GP clinic appointments (Failure to attend may result in medication being reviewed and possibly stopped on specialist advice) |
| 3 | Share any concerns in relation to treatment with medicine. |
| 4 | Report any adverse effects to the specialist or GP whilst taking the medicine. |

**BACK-UP ADVICE AND SUPPORT**

| Contact details | Telephone No. | Bleep: | Fax: | Email address: |
|---|---|---|---|---|
| Specialist: Dr Jill Mann | 01225 476420 | | Fax 01225 463403 | info@rice.org.uk<br>www.rice.org |
| Specialist: Prof Roy Jones | | | | RICE - The RICE Centre<br>Building 8 Royal United Hospital<br>Combe Park Bath BA1 3NG |
| Dr Fiona Harrison | 01225 731460 | | | fiona.harrison4@nhs.net<br>Complex Intervention & Treatment Team,<br>Bath NHS House |
| Specialist: Dr Roz Ward | 01225 396799 | | Fax: 01225 396557 | rosalind.ward@nhs.net<br>AWP Consultant Psychiatrist for Older People BANES Complex Intervention & Treatment Team (Later Life SBU),<br>The Hollies CMHT, High Street,<br>Midsomer Norton, Radstock BA3 2DP |

**SUPPORTING INFORMATION**

**Summary of condition and licensed indications.**

Memantine is a voltage-dependant, moderate-affinity; uncompetitive N-methyl-D-aspartate (NMDA) receptor antagonist that blocks the effects of pathologically elevated tonic levels of glutamate that may lead to neuronal dysfunction.

It has a marketing authorization in the UK for the treatment of patients with moderate to severe Alzheimer's disease. In 2005, the licence was extended to include moderate disease.

Memantine is recommended by NICE, within its licensed indication, as an option for managing Alzheimer's disease for people with:

- Moderate Alzheimer's disease who are intolerant of, or have a contraindication to cholinesterase inhibitors.
- Severe Alzheimer's disease.

Treatment should be under the following conditions:

- Only specialists in the care of patients with dementia (that is psychiatrists, including those specialising in learning disability, neurologists and physicians specialising in the care of older people) should initiate treatment. Carers' views on the patient's condition at baseline should be sought.
- Treatment should be continued only when it is considered to be having a worthwhile effect on cognitive, global, functional and behavioural symptoms as assessed by the specialist.
- Patients who continue on the drug should be reviewed regularly (approximately 6 monthly once stable) using cognitive, global, functional and behavioural assessment. Treatment should be reviewed by an appropriate specialist team, unless there are locally agreed protocols for shared care. Carers' views on the patient's condition at follow-up should be sought

**Treatment Schedule (including dosage and administration)**

Typical Dosage Regimen (Adults) - Initiation and dose adjustment will be the responsibility of the Specialist Consultant

**Starting dose (adult):** Memantine is initially given as 5mg once daily and then increased in steps of 5mg at weekly intervals to a maximum of 20mg daily.

Usual maintenance dose (adult): 20mg once daily Maximum dose: 20mg once daily

**Duration of treatment:** Treatment should be continued only when it is considered to be having a worthwhile effect on cognitive, global, functional and behavioural symptoms. Evidence of continued benefit may be demonstrated through clinical assessment, use of rating scales (e.g. NPI, CMAI)

**Contra-indications and precautions for use**

- No contradictions listed
- Cautions – history of convulsions
- Hepatic impairment – avoid in severe impairment

**Renal Impairment**

| eGFR | |
|---|---|
| 30-49mL/minute/1.73m² | Reduce to 10mg daily, if well tolerated after 7 days, increase in steps to 20mg daily |
| 5-29mL/minute/1.73m² | Reduce dose to 10mg daily |
| Less than 5mL/minute/1.73m² | Avoid |

**Side-effects**

List the most common side-effects and any management of them. Provide guidance on when the GP should refer back to hospital. Refer to the SPC for a full list of adverse effects.

| *Clinical condition (reported frequency)* | *Management* |
|---|---|
| ***Common (10-15%)*** constipation, hypertension, dyspnoea, headache, dizziness, drowsiness | **Reduce dose initially, stop drug if persistent** |
| ***Less commonly*** – vomiting, thrombosis, heart failure, confusion, fatigue, hallucinations and abnormal gait | **Stop drug and discuss** |
| ***Very rarely*** – seizures, pancreatitis, psychosis, depression and suicidal ideation also reported | **Stop drug and seek urgent attention** |

**Any suspected serious adverse reaction to an established drug should be reported to MHRA via the 'yellow card scheme' http://yellowcard.mhra.gov.uk/**

**Monitoring**

**Baseline investigations**

To be undertaken by general practice, prior to referral for memory or psychiatric assessment in accordance with Memory Assessment Referral Pathway for Primary Care (Appendix A)

This includes a physical examination and baseline blood tests (FBC, viscosity (or ESR or CRP) B12, red cell folate, C&E, TSH, LFT glucose, calcium), Baseline brief cognitive examination

Consideration of other underlying causes e.g alcohol, medication, other medical problems

Lipids, syphilis serology and HI testing as appropriate. MSU/Urinalysis if delirium a possibility. ECG if appropriate / Chest x-ray if appropriate. Ongoing physical health monitoring and management and monitoring for adverse effects

**Drug Interactions**

Check BNF Appendix 1 *Before* Co-Prescribing Any Other Drug

- **Amantadine** – Increased risk of CNS toxicity when Memantine given with Amantadine (manufacturer of Memantine advises avoid concomitant use)
- **Antimuscarinics** – Memantine possibly enhances side effects of antimuscarinics
- **Antipsychotics** – Memantine possibly reduces effects of antipsychotics
- **Baclofen** – Memantine possibly modifies effects of Baclofen
- **Barbiturates** – Memantine possibly reduces effects of barbiturates
- **Dantrolene** – Memantine possibly modifies effects of Dantrolene
- **Dopaminergics** – Memantine possibly enhances effects of dopaminergics
- **Ketamine** – Increased risk of CNS toxicity when Memantine given with Ketamine (manufacturer of Memantine advises avoid concomitant use)
- **Primidone** – Memantine possibly reduces effects of Primidone
- **Selegiline** – Memantine possibly enhances effects of Selegiline
- **Warfarin** – Memantine possibly enhances anticoagulant effect of Warfarin

**Cost**

| Drug | Dose | Annual Cost (**March16**) | |
|---|---|---|---|
| Mematine Tablets | 10mg daily | £17.52 | Prescribe generically |
| Mematine Tablets | 20mg daily | £19.32 | Prescribe generically |

**References**

Summary of Product Characteristics at EMC

NICE Technology Appraisal – available at TA217 March 2011 NICE Dementia Guidelines NICE CG42 NICE Dementia Pathways

Appendix A – Guidance on Memory Assessment Referral Pathway for Primary Care

Appendix B – Memory Assessment Referral Pathway for Primary Care

**Document details** Joy Craine BCAP Interface Pharmacist Sept 2012 updated March 2016 Approved March 2016