NHS Rotherham Clinical Commissioning Group

Rotherham Doncaster and South Humber NHS Foundation Trust

Shared Care Protocol for the prescribing of Memantine for Dementia

1. REFERRAL CRITERIA

Patients of any age that are suspected to be suffering from moderate to severe Alzheimer's disease will be referred to Older People's Mental Health Service for assessment.

2. PATIENT ELIGIBILITY

Initial diagnosis (monotherapy)

- patients with moderate Alzheimer's disease **intolerant** of acetylcholinesterase inhibitors (AChEI) or in whom their use is **contraindicated**.
- patients with **severe** Alzheimer's disease

Established diagnosis (dual therapy)

- consider memantine in addition to an AChE inhibitor in patients who have moderate disease
- offer memantine in addition to an AChE inhibitor in patients who have severe disease

The patient may also be prescribed memantine for the treatment of Parkinson's disease dementia and Lewy Body dementia, when AChEI's are not tolerated or contraindicated, which would also be covered by this shared care agreement.

3. AREAS OF RESPONSIBILITY

Primary Care responsibilities	Secondary care responsibilities
Identifying patients who are suspected to be suffering from moderate to severe Alzheimer's disease. Referral to specialist mental health services for diagnosis and assessment. Prescribing of Memantine following initiation and stabilisation by secondary care with documented evidence of clinical effectiveness. **LFTs** *Approximately 1 in a 100 patients taking Memantine incur raised liver function tests. This is usually clinically insignificant and **does not** require screening / monitoring. If raised liver function tests are coincidentally detected, the GP should **stop** Memantine and refer back to secondary care for review.*	Diagnosis of moderate to severe Alzheimer's disease. Assessment of mental state. Initiation of treatment with Memantine. Dose adjustment to maintenance dose. Assessment of effectiveness* of treatment at minimum of one month after reaching maintenance dose. Reassessment of effectiveness* of treatment on a regular basis to ensure continuing benefit. **Appropriate scales such as the Montreal Cognitive Assessment (MoCA), Severe Impairment Battery (SIB), The Neuropsychiatric Inventory (NPI), and The Bristol Activities of Daily Living (BADL) Scale should be used to help judge effectiveness.* Discontinuation of treatment if ineffective or no longer indicated. Consideration of clinical significance of raised liver function tests.

4. COMMUNICATION AND SUPPORT

Working hours hospital contact: Chrissy Taylor, Memory Services Manager, Howarth House, Brinsworth Lane, Rotherham, S60 5BX **Tel number:** 01709 302955 **Fax:** 01709 830213 **Email:** chrissy.taylor1@nhs.net
Out of hours contacts and procedures: On call psychiatric staff via the access team **Tel number:** 01709 302670

5. CLINICAL INFORMATION

Prescribed indications	Treatment of patients with moderate to severe Alzheimer's disease.
Therapeutic summary	Memantine is an NMDA receptor antagonist in the presence of abnormal glutamate concentrations at the synapse: the effect of which is to normalise neuronal action potentials and function.
Contraindications	Hypersensitivity to active substance or any of the excipients.
Special warnings and precautions	Not recommended for patients with severe renal impairment. Caution is recommended with patients suffering from epilepsy, or a history of convulsions. Clinical data is limited on patients with myocardial infarction, congestive heart failure and uncontrolled hypertension **Patients with these conditions should be closely supervised.**
Overdose	Symptomatic treatment.
Elimination	Mainly unchanged via the kidneys.
Dose & Route of administration	Treatment starts with 5 mg daily for 1st week; the 2nd week 10 mg daily; the 3rd week 15 mg daily and from the 4th week 20mg daily. Maintenance dose is 20 mg once daily (taken with or without food) Reduce dose to 10mg daily in patients with an eGFR < 30mls/min.
Presentation	Treatment initiation ("starter") pack: 7 x 5mg, 7 x 10mg, 7 x 15mg, 7 x 20mg orally as tablets. Continuation: 10/20mg tablets (orodispersible tablets or 10mg/ml s/f oral solution if documented swallowing difficulties)

Duration of treatment and when to stop	Treatment should only be continued when it is considered to be having a beneficial effect on cognitive, global, functional or behavioural symptoms.
CONSULT SPC FOR FULL PRODUCT INFORMATION	
Side effects	The most frequently occurring adverse events with a higher incidence in the memantine group than in the placebo group were dizziness (6.3% vs 5.6%, respectively), headache (5.2% vs 3.9%), constipation (4.6% vs 2.6%), somnolence (3.4% vs 2.2%) and hypertension (4.1% vs 2.8%). Other adverse drug reactions include • Common (between 1/10 and 1/100) balance disorders, dyspnoea, elevated LFTs, • Uncommon (between 1/100 and 1/1,000) fungal infections, confusion, hallucinations, abnormal gait, cardiac failure, venous thrombosis/thromboembolism, vomiting, fatigue, anxiety, increased muscle tone, cystitis and increased libido • Very rare (less than 1/10,000) or unknown seizures, pancreatitis, psychosis, depression, suicidal ideation also reported.
Monitoring Requirements	Regular review (at least annually) of cognitive, global, functional & behavioural symptoms.
Clinically relevant drug interactions	• Concomitant use of amantadine, ketamine or dextromethorphan should be avoided. • Effects of L-dopa, dopaminergic agonists and anticholinergics may be enhanced. • Effects of barbiturates and neuroleptics may be reduced. • Effect of dantrolene and baclofen may be modified. Plasma levels of cimetidine, ranitidine, procainamide, quinidine quinine and nicotine may be increased. Urinary pH increase may elevate plasma levels of Memantine.
Supply, storage and reconstitution instructions	No special supply, storage or reconstitution instructions
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Updated by (May 2019) – v3	Anil Rajpal – Senior Pharmacist, RDaSH John Bottomley – Consultant Psychiatrist, Clinical Director, RDaSH Raz Saleem – Prescribing Advisor, NHS RCCG Edward Dimelow - Consultant in Old Age Psychiatry
Review	This document will be reviewed in light of any new evidence / guidelines OR by May 2022
References	1) NICE Technology Appraisal 217 (TA 217): Alzheimer's disease - donepezil, galantamine, rivastigmine and memantine. March 2011. 2) NICE Dementia (NG97): assessment, management and support for people living with dementia and their carers. June 2018.