Memantine

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Further copies can be obtained from:
Pharmacy Department, Great Western Hospital
NHS Swindon

Addressograph label

Patient's Name _____

Consultant Name _____

Consultant Signature _____

Date _____

I agree to your request to prescribe Memantine in accordance with the attached shared care guideline:

GP Name _____

GP Signature _____

Date _____

Memantine tablets & oral solution (TLS Amber in Swindon)

For the treatment of moderate to severe Alzheimer's disease

AREAS OF RESPONSIBILITY FOR THE SHARING OF CARE

This shared care agreement outlines how responsibility for prescribing **memantine** might be shared between specialist and general practitioner (GP). GPs are invited to participate. If the GP is not confident to undertake these roles, then he or she is under no obligation to do so. In such an event, the total clinical responsibility for the patient for the diagnosed condition remains with the specialist. If a specialist asks the GP to prescribe this drug, the GP should reply to this request as soon as practicable.

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.

Memantine is recommended as a treatment option for managing moderate to severe Alzheimer's disease. Treatment with **memantine** should be initiated and stabilised within secondary care. Once the patient's condition is clinically stable and assessed by specialists in dementia as benefiting from treatment, it can be appropriate for GPs/NMP to resume prescribing in accordance with this Shared Care Agreement (SCA).

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.

This shared care is intended to apply to patients who have been initiated on treatment (and who have been assessed as benefiting) by a specialist in the care of patients with dementia, in accordance with the guidance from the NICE Technology Appraisal 'Donepezil, galantamine, rivastigmine and memantine for the treatment of Alzheimer's disease' (NICE TA 217) and NICE Dementia Clinical Guideline 42.

The doctor who prescribes this medication legally assumes clinical responsibility for **memantine** and the consequences of its use.

RESPONSIBILITIES and ROLES

	Specialist responsibilities
1	Initiate treatment and Prescribe the first three moths of treatment to stabilise the dose
2	Discuss the benefits and side effects of treatment with the patient.
3	Ensure compatibility with other concomitant medication
4	Ask the GP whether he or she is willing to participate in shared care, and discuss the shared care arrangement with the patient & obtain their consent.
5	Supply GP with summary within 14 days of a hospital out-patient review, in-patient stay. or community visit.
6	Give advice to the GP on when to stop treatment.
7	Report adverse events to the MHRA & GP.
8	Ensure that clear backup arrangements exist for GPs to obtain advice and support should they need it.

	General Practitioner responsibilities
1	Reply to the request for shared care as soon as practicable.
2	Prescribe medicine at the dose recommended
3	Ensure compatibility of with other concomitant medication.
4	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.
5	Report to and seek advice from the specialist on any aspect of patient care that is of concern to the GP and may affect treatment.
6	Stop treatment on the advice of the specialist.
7	Report adverse events to the specialist and MHRA.

	Patient's role
1	Attend all appointments with GP and specialist, including those for blood tests and other monitoring.
2	Report to the specialist or GP if he or she does not have a clear understanding of the treatment.
3	Share any concerns in relation to treatment with medicine.
4	Inform specialist or GP of any other medication being taken, including over-the-counter products.
5	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:
Dr Simon Manchip Consultant Old Age Psychiatrist	01793-327800 (and ask to be put through)	n/a	01793-327956	Simon.manchip@nhs.net
Theresa Turner Lead Locality Pharmacist	01793-327800 (and ask to be put through)	n/a	n/a	theresa.turner@nhs.net
Swindon Memory Service	01793-327800 (and ask to be put through)	n/a	n/a	n/a
Swindon Primary Care Liaison Service	01793-835787	n/a	n/a	n/a
AWP Medicines Information	01225- 675455	n/a	n/a	awp.medicineinformation@nhs.net

SUPPORTING INFORMATION

Summary of condition
Dementia in Alzheimer's disease (includes mixed Alzheimer's and vascular dementia)

Licensed indications
Moderate or Severe Alzheimer's disease

Expected / established place in local treatment pathway:
There are 3 major times memantine is used

1) For agitation and/ or preservation of functional ability in severe Alzheimer's disease (licensed indication)
2) As a cognitive enhancer in moderate Alzheimer's disease if a cholinesterase is contra-indicated (as per NICE TA 217) (licensed indication)
3) To augment a cognitive enhancer as per local memory clinic processes (off-label use)

Dosage and administration
5mg once daily rising to a usual maintenance dose of 20 mg od

Contra-indications and precautions for use
There are no contraindications, but caution must be used in people with epilepsy; avoid in severe hepatic impairment.

Side-effects
Refer patient back to the specialist if any of these side-effects cause concern**.**

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

Please note that the following convention has been used for the classification of side-effects: very common (≥ 1/10), common (≥ 1/100 to <1/10), uncommon (≥ 1/1,000 to <1/100), rare (≥ 1/10,000 to <1/1000) and very rare (<1/10,000).

Refer to the SPC for a full list of adverse effects & further information http://www.medicines.org.uk.

This medicine does not have black triangle (▼) status, but serious suspected reactions (even if well recognised or causal link uncertain) should be reported to the MHRA.

Monitoring

Please note the patient's baseline monitoring, such as scans and blood tests which are carried out as part of the referral to the specialist service and are performed mainly to rule out other diagnosis. These can be used to compare routine blood tests to as part of any physical health check.

Parameter	Frequency of monitoring	Action
Physical health	No specially monitoring required above usual physical health checks for older people in primary care	Seek advice by telephone from consultant if required (see contacts earlier in this document)

Cognition	Ask patient and carer about activities of daily living and if they feel that continuation with treatment is in their best interests, formal testing not usually required	Seek advice by telephone from consultant if required (see contacts earlier in this document)
If prescribed for agitation as a main feature of the persons dementia	Note any stop or withdrawal dates suggested by the specialist and discontinue therapy at the point suggested.	If carers suggest after the stop date that symptoms have returned seek advice by telephone from consultant if required (see contacts earlier in this document)

eGFR	**Action**
30-49mL/minute/1.73m²	Reduce dose 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

Drug Interactions

Due to the pharmacological effects and the mechanism of action of Memantine the following interactions may occur:

- The mode of action suggests that the effects of L-dopa, dopaminergic agonists, and anticholinergics may be enhanced by concomitant treatment with NMDA-antagonists such as Memantine. The effects of barbiturates and neuroleptics may be reduced. Concomitant administration of Memantine with the antispasmodic agents, dantrolene or **baclofen,** can modify their effects and a dose adjustment may be necessary.

- Concomitant use of Memantine and amantadine should be avoided, owing to the risk of pharmacotoxic psychosis. Both compounds are chemically related NMDA-antagonists. The same may be true for ketamine and dextromethorphan there is one published case report on a possible risk also for the combination of Memantine and phenytoin.

- Other active substances such as **cimetidine, ranitidine, procainamide, quinidine, quinine and nicotine** that use the same renal cationic transport system as amantadine may also possibly interact with Memantine leading to a potential risk of increased plasma levels.

- There may be a possibility of reduced serum level of hydrochlorothiazide (HCT) when Memantine is co-administered with HCT or any combination with HCT.

- In post-marketing experience, isolated cases with international normalized ratio (INR) increases have been reported in patients concomitantly treated with **warfarin.** Although no causal relationship has been established, close monitoring of prothrombin time or INR is advisable for patients concomitantly treated with oral anticoagulants

Cost
Memantine 10mg tablets 28 £1.46
Memantine 10mg/ml oral solution sugar free 50 ml £ 59.31
Memantine 20mg tablets 28 £1.61
(Source: Drug Tariff January 2016)

References

1. The electronic medicines compendium (Memantine accessed 7th August 2015)
2. The Drug Tariff (electronic) August 2015 http://www.drugtariff.nhsbsa.nhs.uk/#/00232686-FA/FA00232560/Part VIIIA products M
3. Joint Formulary Committee. British National Formulary (online) London: BMJ Group and Pharmaceutical Press <http://www.medicinescomplete.com> accessed on 7th August
4. The Drug Tariff (electronic) January 2016 http://www.drugtariff.nhsbsa.nhs.uk/#/00289861-DD/DD00289611/Part VIIIA products M

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