Health and Social Care Board

Interface Pharmacist Network Specialist Medicines

Tolcapone

Neurology shared care guideline

Specialist details	Patient identifier
Name: _____	
Location: _____	
Tel: _____	**Date:** _____

Introduction

Licensed indications: Tolcapone is indicated in combination with levodopa/ benserazide or levodopa/carbidopa for use in patients with levodopa-responsive idiopathic Parkinson's disease and motor fluctuations, who failed to respond to or are intolerant of other catechol-O-methyl transferase (COMT) inhibitors.

Adult dosage and administration

100mg three times a day, leave 6 hours between each dose; maximum dose is 200mg three times a day in exceptional circumstances. The first daily dose should be taken at the same time as the levodopa with dopa-carboxylase inhibitor. Patients on higher doses of levodopa (> 600mg daily) or those who had moderate or severe dyskinesia before beginning treatment may require a levodopa dose reduction (specialist should advise).

Available as: 100mg tablets

Hospital specialist responsibilities

- Assess patient's suitability for treatment with tolcapone.
- Assess patient's current repeat medications for potential significant interactions with the new treatment and discuss with GP if any concerns.
- Agree shared care with patient's GP.
- Provide patient/carer with relevant written information on use, side-effects and need for monitoring of medication. In particular, patients should be informed of the risks of impulse control disorders[1] and liver injury[2] and advised to seek medical advice immediately.
- Provide shared care monitoring record booklet and record baseline tests.
  Baseline tests: LFT, U&E
- Review results of safety monitoring and request additional tests as required.
- Monitor disease response to treatment and need to continue therapy – tolcapone should be discontinued if substantial clinical benefits are not seen within 3 weeks of initiation of treatment regardless of dose.
- Continue to review the patient at agreed specified intervals, sending a written summary to the GP whenever the patient is reviewed.
- Provide any other advice or information for the GP if required.

GP responsibilities

- Prescribe tolcapone, continued prescribing is appropriate for patients attending regular review.
- Arrange and record ongoing monitoring as agreed with specialist, ensuring practice systems are in place to recall patients for monitoring blood tests:
  - **LFT** – every 2 weeks for the first year, then every 4 weeks for the next 6 months and then every 8 weeks thereafter. If the dose is increased to 200mg three times a day, liver enzyme monitoring should take place before increasing the dose and then be reinitiated following the same sequence of frequencies as above.
  - Withhold tolcapone and contact Parkinson's disease nurse specialist if ALT and/or AST exceed the upper limit of normal.
- Prevent ongoing prescription if patient is not compliant with monitoring. Liaise with Parkinson's disease nurse specialist if appropriate.
- Inform Parkinson's disease nurse specialist immediately if impulse control disorders develop (pathological gambling, increased libido, hypersexuality, compulsive spending or buying, binge eating and compulsive eating)
- Report any adverse drug reactions to Parkinson's disease nurse specialist and the usual bodies (eg. MHRA / CHM).
- Ensure no significant drug interactions with other medicines.

Adverse effects, precautions and contraindications

- [2] **Hepatotoxicity** is rare but potentially fatal. Symptoms or signs suggesting the onset of hepatic failure include persistent nausea, fatigue, lethargy, anorexia, jaundice, dark urine, pruritus and right upper quadrant tenderness
- **Increases in transaminase levels** have usually appeared within 6 to12 weeks of starting treatment, and have not been associated with any clinical signs or symptoms. In about half the cases, transaminase levels have returned spontaneously to baseline values whilst patients continued tolcapone treatment.
- **Renal impairment:** patients with severe renal impairment (creatinine clearance < 30 mL/min) should be treated with caution.
- [1] **Impulse control disorders:** patients and carers should be made aware that behavioural symptoms of impulse control disorders including pathological gambling, increased libido, hypersexuality, compulsive spending or buying, binge eating and compulsive eating can occur in patients treated with tolcapone, review of treatment is recommended if such symptoms develop.
- **Dyskinesia, nausea, vomiting, sleep disturbances, dystonia, hallucinations and confusion** can occur; reducing the dose of levodopa may often mitigate these adverse reactions.
- **Diarrhoea** occurred in 16 - 18% of patients in studies and was the most common reason for withdrawal.
- **A symptom complex resembling the neuroleptic malignant syndrome (NMS)** (characterised by elevated temperature, muscular rigidity, altered consciousness and autonomic instability), with no other obvious aetiology, has been reported in association with rapid dose reduction, withdrawal of, or changes in antiparkinson therapy. If NMS is suspected the patient should be referred to the Parkinson's disease nurse specialist urgently.
- **Pregnancy:** use only if benefit outweighs risk.
- **Breastfeeding:** women should not breastfeed during treatment with tolcapone.

Contraindications include:

- Hypersensitivity to tolcapone or any of its other ingredients.
- Evidence of liver disease or increased liver enzymes.
- Severe dyskinesia.
- A previous history of Neuroleptic Malignant Syndrome (NMS) symptom complex and/or non-traumatic rhabdomyolysis or yyperthermia.
- Phaeochromocytoma.
- Treatment with non-selective monoamine oxidase inhibitors (MAOIs).

Common drug interactions

- **MAOIs**: avoid concomitant use of tolcapone with monoamine oxidase inhibitors.
- **Methyldopa**: antiparkinsonian effects of tolcapone antagonised by methyldopa.

Communication

For any queries relating to this patient's treatment with tolcapone, please contact the patient's Parkinson's disease nurse / nursing contact named below:

Name: _____

Location: _____

Tel: _____

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

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