Guidelines for staff managing clozapine for patients admitted to Acute and Community Hospitals

1. Introduction

1.1 Clozapine is an antipsychotic used most commonly in the treatment of schizophrenia resistant to other treatments. Therefore patients prescribed clozapine have a more severe illness.

1.2 Patients prescribed clozapine are subject to mandatory regular FBC monitoring because of a relatively high (~1%) risk of neutropenia/agranulocytosis during treatment. These FBCs are recorded by a clozapine monitoring service which authorises on-going supply of clozapine.

1.3 Co-prescription with clozapine of other medicines that may cause blood dyscrasias increases the risk of neutropenia/agranulocytosis.

1.4 Clozapine remains on all Sussex clinical commissioning groups’ “Red lists”, prescribing cannot be transferred to primary care.

1.5 It is a requirement that all patients prescribed clozapine; their consultant psychiatrist and the dispensing pharmacist are registered with a clozapine monitoring agency. There are three agencies nationally (ZTAS, CPMS and DMS). Only registered pharmacies can dispense clozapine.

1.6 Side effects of clozapine may include:
   - Severe constipation, leading to impaction and obstruction.
   - Myocarditis/cardiomyopathy
   - Disturbed glucose control and diabetes

1.7 Omission of clozapine for more than 48 hours necessitates re-titration of the dose starting at 12.5 mg or 25 mg/day; during which frequent monitoring of physical parameters is mandatory. Whenever possible, such a treatment break should be avoided. Sudden discontinuation of clozapine may result in an abrupt and severe relapse of psychotic symptoms. Get advice from your liaison psychiatric team or local mental health pharmacy team on starting dose and speed of re-titration.

1.8 In some medical scenarios, e.g. acute infection, certain cardiac symptoms; or following a sudden cessation or decrease in smoking, patients may need a lower dose of clozapine than usual. The management of individual cases is best discussed with the liaison psychiatry team or if unavailable your local mental health pharmacy team.

1.9 Raised clozapine levels may cause drowsiness, ataxia, confusion, seizures. Clozapine serum levels may be markedly raised by:
   - Cessation/reduction of cigarette-smoking – be aware of this if smoking is stopped/prevented during admission. Nicotine replacement therapy DOES NOT prevent the rise in serum levels.
   - Interaction with other medicines including erythromycin and ciprofloxacin.

2. What to do

2.1 Consider the role of clozapine and its side-effects in the context of:
   - the current presentation including; cardiomyopathy/myocarditis, constipation and problems related to raised serum levels
   - recent, current and intended co-prescribed medicines
   - changes in smoking status
2.2 Check FBC to exclude clozapine-induced agranulocytosis / neutropenia. Clozapine must be stopped if WBC <3x10^9/l or neutrophils <1.5x10^9/l

2.3 Confirm dose of clozapine, e.g. from patients own drugs, relevant pharmacy. GP summary care records may not include current information as it is a 'red' listed medicine.

2.4 Confirm that the patient has been adherent with treatment, notably over the previous 48 hours. If there are any concerns that the patient has been non-adherent for greater than 48 hours, then re-titration may be required.

3. How to maintain supplies of clozapine for patients

On Admission

Undertake the routine medicines reconciliation process.

Was the patient admitted because of side effects /complications related to clozapine?

YES

Seek advice from a senior member of the medical/psychiatric team about how to proceed.

NO

Do not automatically continue clozapine at the previous dose due to the increased risks of side effects, including seizures. If the treatment plan is to continue clozapine this will need to be re-titrated. The decision to restart and advice about a re-titration regimen should be sought from a member of the psych liaison team or if unavailable your local mental health pharmacy team.

The pharmacy that usually supplies the patient’s clozapine will also need to be informed of the treatment break so they can inform the clozapine monitoring service.

Depending on the duration of the treatment break more frequent FBCs may now be necessary.

Has there been a break in continued clozapine treatment of > 48 hours?

YES

- Assess the patient’s own medicines’ suitability for use medicines following the usual procedure before using.

- Establish and document:
  - which clozapine monitoring agency the patient is registered with.
  - the patients’ registration number.
  - how often the patient is due to have their FBCs monitored, weekly, fortnightly or 4-weekly.
  - the date of the last FBC result and whether this is valid to dispense against.
  - date when an FBC is next due.
  - which pharmacy supplies the patient and inform that team.

NO

Can a supply of clozapine be brought in from home by a relative or carer in time?

YES

- If there is no timely access to the patient’s own supply of clozapine, the same brand should be provided by the acute trust’s pharmacy. This can be ordered via wholesalers as per other medicines.

NO

If the patient have their own supply of clozapine with them on the ward?

YES

As clozapine is not prescribed in primary care, to access records and establish the dose of clozapine and date of last supply, contact the supplying hospital pharmacy, homecare supplier or community pharmacist as appropriate.

NO

Continue overleaf
**During Admission**

- Confirm if the patient is a smoker. For patients who are smokers, manage the potential impact of enforced smoking cessation on their clozapine levels to avoid toxicity, check levels and amend the dose as needed. Get specialist advice and undertake plasma level tests.
- Continue to monitor FBC results at the interval recommended by the clozapine monitoring service that the patient is registered with.
- Report values of FBCs to the relevant clozapine monitoring service.
- The acute trust hospital should continue to provide supplies of clozapine for the duration of the patients admission (e.g. should make supplies if the patient’s own supplies are used up).
- Inform the usual supplying pharmacy of the patient’s admission that there is no need to supply.

**On Discharge**

- Provide the same duration of supply of clozapine to the patient as per the other discharge medicines, but reduce if needed to be in line with the durations allowed by the FBC monitoring regulations.
- Inform the usual supplying pharmacy of the patients discharge, and the details including amount of clozapine supplied.

### 4. Contact Details

<table>
<thead>
<tr>
<th>TRUST (Clozapine brand and monitoring agency)</th>
<th>Usual pharmacy that supplies clozapine to patient of Sussex Partnership</th>
<th>Clinical Advice Contacts (Some of these contacts work part-time. If uncontactable call Worthing hospital clozapine supply number).</th>
<th>Out of hours contacts</th>
</tr>
</thead>
</table>
| Sussex Partnership NHS Foundation Trust    | Worthing Hospital Pharmacy 01903 285075                                  | North West Sussex  
Kinloshery Renwick  
07823 789230  
Brighton & Hove  
Nana Tomova  
07825 923445  
Adur, Arun, Worthing and Chichester  
Ami Hale 07825 923501  
East Sussex  
Sally-Anne Heasman  
07823 790047  
If your local contact is unavailable, please call the Worthing Hospital clozapine number for advice | Contact the Sussex Partnership out of hours on call pharmacist on: 0300 304 1234 |
| Clozaril® Patient Monitoring Service 0845 769 8269 |  |  | |
| Zaponex® Treatment Access Service 0207 365 5842 |  |  | |
| Denzapine® Monitoring Service 0333 2004141 |  |  | |

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