

 <p style="text-align: center;"><b>CREDIT VALLEY</b> THE CREDIT VALLEY HOSPITAL</p>	<b>CLINICAL PRACTICE GUIDELINE</b>	<b>PROFESSIONAL PRACTICE</b>
<b>TITLE: Clozapine Treatment Protocol</b>		
<b>DATE OF ISSUE:</b> 2003, 06	<b>PAGE</b> 1 <b>OF</b> 4	<b>NUMBER:</b> CPG 3-2
<b>SUPERCEDES:</b> New	<b>ISSUED BY:</b> _____ <b>TITLE:</b> Chief of Medical Staff	
	<b>ISSUED BY:</b> _____ <b>TITLE:</b> President	

**Purpose:**

To provide a guideline for the use of clozapine for patients who have treatment resistant schizophrenia.

**Selection Criteria:**

Inclusion:

Patients who are unresponsive to, or who cannot tolerate, other anti-psychotics.

Patients selected for therapy should have a history of:

- Inadequate response to an appropriate course of therapy of an anti-psychotic
- Inability to achieve an effective dose due to intolerable adverse effects.

Exclusion:

Patients with an abnormal white blood count (WBC) and/or differential count. Clozapine should not be used simultaneously with other agents known to suppress bone marrow function.

Caution should be used in administering clozapine to patients having a history of one or more of the following:

- seizures or other predisposing factors
- underlying cardiovascular disease or arrhythmias
- hepatic or renal disease
- prostatic enlargement
- narrow-angle glaucoma

**Responsibilities:**

A physician's order for the initiation of the Clozapine Treatment Protocol is required. The physician will complete an assessment of the patient including a review of the lab work, as outlined under Treatment and Monitoring. The physician is responsible for advising the appropriate pharmacy of medication and dosage changes, and for establishing criteria for consultation.

**Patient Evaluation:**

Prior to initiating clozapine therapy the physician and nurse will meet with the patient and the family to obtain an informed consent according to the Consent Policy #PP3.1. Once an informed consent has been obtained, the patient will receive an information booklet and an appointment will be arranged to complete the following:

- diagnostic investigation including: CBC, WBC + 5 part differential, FBS, creatinine, urea, electrolytes, bilirubin, alkaline phosphatase, AST
- ECG will be done if there is a known history of cardiac problems
- EEG will be completed if there is a know history of a seizure disorder
- a baseline assessment which includes the Schizophrenia Programme Outcome Measures and Side Effect Profile.

**Completion of Required Forms:**

The following forms must be completed and FAXED to NOVARTIS. (FAX # 1-800-465-1312):

- Clozaril Support and Assistance Network (CSAN) Enrollment/Modification/Discontinuation Form - Please note that sections 3 and 4 of this form must be completed and signed by the Treating Physician and Pharmacist
- Consent for Treatment with Clozapine form must be completed by the patient and/or legal guardian
- Hematology Results Baseline Form
- Ontario Funding Registration Questionnaire (includes indications for clozapine, details of neurologic intolerance, current medications, previous anti-psychotic medications used and contraindications for clozapine) - to be completed by nurse and signed by physician

The following forms must be completed and FAXED to QUEEN STREET MENTAL HEALTH CENTRE CLOZAPINE PROGRAM REGIONAL COORDINATOR. (FAX # 416-535-7199).

- Ontario Funding Registration Questionnaire - the same as listed above
- Funding Registration Form

Please note that the Regional Coordinator of the Queen Street Mental Health Centre Clozapine Program will inform the physician if the patient has been accepted into the program by faxing an assigned patient-specific CSAN number. This number is to be recorded on the CSAN forms where indicated.

**Treatment and Monitoring:**

As soon as acceptance into the program has been confirmed, a prescription for clozapine will be obtained.

Initiation of Treatment:

- 1) Ensure that the results of the WBC and 5 part differential are within an acceptable range and were obtained within the last 7 days. **Warning:** clozapine should not be administered to patients with a baseline WBC < 2.5 and or granulocyte < 1.5 unless otherwise indicated by the physician's assessment.
- 2) Obtain and record a baseline weight, blood pressure and pulse.
- 3) Administer 12.5 mg po clozapine and document on the Schizophrenia Programme medication administration record.
- 4) Monitor BP every 30 minutes for one hour. If BP fluctuates then continue to monitor every 30 minutes until stable. If BP drops below 90/60 or if the patient experiences any adverse reactions the attending physician must be notified to assess patient. Document BP readings on the patient's health record.
- 5) Patient's who have not experienced a drop in BP or other adverse reactions will be given a prescription for clozaril 25 mg po qhs for one week.

Ongoing Monitoring:

- 1) Weekly for 26 weeks CBC, WBC and 5 part differential will be obtained and documented on the CSAN forms and faxed as outlined above. After 26 weeks biweekly CBC and 5 part differential will be obtained, documented on the CSAN forms and faxed as outlined above, for the duration of clozapine administration. Please note that in the case of a warning fall in the granulocyte count, a CBC and 5 part differential count will be obtained twice per week until otherwise indicated by the physician.
- 2) The physician will review the lab results to ensure that they are within the acceptable range prior to authorizing the appropriate pharmacy to provide the patient with another one or two week supply of clozapine.
- 3) Appointments with the attending physician are indicated if the patient experiences any of the following:
  - deterioration of mental status
  - noncompliance with treatment (lab work, medication administration)
  - intolerable adverse effects
  - values below normal range for WBC < 2.5 or granulocyte < 1.5.
- 4) Patient's receiving clozapine must have the following assessment completed ANNUALLY:
  - physical examination
  - diagnostic investigation including: CBC, WBC and 5 part differential, FBS, creatinine, urea, electrolytes, bilirubin, alkaline phosphatase, AST
  - ECG will be done if there is a known history of cardiac problems
  - EEG will be completed if there is a known history of seizures
  - treatment evaluation which includes the Schizophrenia Programme Outcome Measures and Side Effect Profile

Evaluation:

Lab results will be monitored weekly/biweekly by the physician and by the NOVARTIS CSAN Coordinator. Patient's compliance to weekly/biweekly lab work and to medication administration will be monitored weekly/biweekly by the registered nurse.

**References:**

- 1) Novartis - "Clozaril - A New Therapeutic Outlook in Treatment-Resistant Schizophrenia"

**Approval:**

Department of Psychiatry: January 2003  
Mental Health Steering Committee: November 2002  
Pharmacy and Therapeutics Committee: June 2003  
Professional Practice Committee: June 2003  
Clinical Quality Care Committee: June 2003  
Medical Advisory Committee: September 08, 2003