Office of the Chief Psychiatrist

COVID-19 Positive Interim Clozapine Management Guideline

18 January 2022

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This updated guideline has been prepared to be used in response to people prescribed clozapine who have a positive COVID-19 test either by PCR or Rapid Antigen Test (RAT).

With the current Omicron public outbreak, the number of positive COVID-19 people in the community has surpassed modelling and expectations based on earlier strains. The increased demand means that the original plan to manage all COVID-19 positive people taking clozapine in a hospital setting is no longer able to be the first option, as was required in the earlier version of these guidelines. In addition, while Omicron COVID illness remains potentially serious and life threatening, for many people the illness can be mild, particularly for those who are vaccinated. Already people taking clozapine with mild COVID symptoms have asked to receive care and monitoring at home rather than automatic hospital referral.

The purpose of this interim guideline is to provide a consistent management approach across the state to ensure that the risk of infection, toxicity due to increased clozapine levels and other adverse events are minimised for this group of people due to their COVID-19 diagnosis.

This guideline is an interim measure used to reduce the risk to vulnerable people, experiencing a positive COVID-19 result through the course of the COVID-19 pandemic, while ensuring that they receive appropriate clozapine care and is not to be taken as a permanent change in management guidelines. This information is supplementary to the SA Health Clozapine Management Clinical Guideline, and the current guidelines for the assessment and treatment of COVID-19 in vulnerable populations.

This interim guideline applies to the clozapine clinics currently held within SA Health clozapine centres and has been extended to people prescribed clozapine in GP shared care.

This interim guideline was reviewed by members of the Clozapine Strategic Management Group, specialist SA Health pharmacists, Clozapine Coordinators and the Chief Psychiatrist on 12.01.2022. The COVID-19 positive interim clozapine management guideline has taken into consideration the current information we have available from the limited number of COVID-19 positive people taking clozapine.

International case series have shown that COVID-19 infection is associated with a drop in neutrophils[1]. There are also reports of high clozapine levels associated with COVID-19 infection[2,3]. Currently there are five known local cases. We are still collecting data, but in two cases there has been a significant drop in white cell count with one person in the AMBER range when admitted to hospital and another person in the RED range necessitating clozapine cessation. A third person has had a dramatic increase in their clozapine level in excess of 1100ug/L.

As there are seemingly different and potentially simultaneous responses to the COVID-19 infection it is important for us to maintain a consistent approach to management of COVID-19 positive people. We also need to consider the risk of cardiac complications if levels are high.

The recommended course of action is to increase monitoring to allow timely intervention should high levels, low WCC or cardiac complications emerge, allowing early activation of existing protocols for these adverse effects. This management guideline is to be used in conjunction with existing CPMS and SA Health AMBER/RED protocols and SA Health Cardiac Guidelines:

- Any person in shared care to be managed by the CMHS until COVID-19 negative and all parameters are back to normal. In Regional areas where the GP service is the only option the GP remains the lead care provider with additional care coordination and specialist advice from the MHS.
- Weekly blood testing including:
    - **CBE** to monitor WCC and NC
    - **Troponin** for cardiac assessment of potential myocarditis
    - **CRP** for cardiac assessment, acknowledging that this may be raised due to the infection.
    - **Clozapine level** – to monitor for clozapine toxicity and assess the need for dosage adjustment
- Twice weekly telephone contact to monitor for side effects, potential signs of clozapine toxicity and mental wellbeing in isolation.
- Referral to the in home COVID-19 Response Care Team (CRCT) to closely monitor for physical health complications such as pneumonia or cardiac complications, may be made through the Metropolitan Referral Unit. Noting that this service is experiencing high demand and local GP involvement is also desirable.
  Regional areas can obtain a referral form from grace.macdonald@sa.gov.au or wassana.sorich@sa.gov.au This form is submitted via iCCnet to their COVID-19 email that will accompany the referral form and will be directed to the CRCT.
- One week supply of medication to ensure review and potential dosage change requirements. Review of the person's current supply and liaison with community pharmacy may be needed including delivery or collection arrangements.
- Blood test monitoring to continue at the weekly rate until the person is COVID-19 negative. Of course, should the person record an AMBER or RED result or a raised Troponin then usual management protocols of increased blood monitoring are to be enacted, incorporating the additional blood testing.
- RAT every seven days until negative.
- An extra clozapine level is to be taken one week following the negative COVID-19 result to ensure levels are returning to normal for the person and monitor any dosage adjustment requirements.

While it may be possible to manage a person on clozapine who is COVID-19 positive at home with the added management plan and potential CRCT, it must be stressed that the situation may dramatically change if the person goes into the RED or becomes clozapine toxic. Close monitoring is required, careful monitoring and oversight may assist a person safely stay on clozapine while unwell with COVID-19 and prevent a relapse of psychosis.

While hospital admission is not automatically required, the need for hospital should be considered on each occasion. Depending on each person's circumstances admission to an

appropriate COVID positive medical unit or medical hotel for physical health monitoring or psychiatric unit if mentally unwell may be warranted.

- **It is recommended that anyone who is COVID-19 positive and returns a RED blood result should be managed as a medical admission** until such time that they are stabilised. Noting that cessation of clozapine will be required, potentially triggering rebound psychosis.

SA Pathology provides an in home phlebotomy service for any person unable to access a collection centre. SA Pathology domiciliary service can be contacted on 82223000

In Regional areas where an in-home service may not exist it is recommended to liaise and collaborate with the local community nursing team.

An SLS and eCPMS notification is required to be made for all people on clozapine who are COVID-19 positive.

The eCPMS notification will assist in a timely rechallenge if a person is required to cease clozapine due to a RED result whilst COVID-19 positive.

An SLS notification will assist in tracking people on clozapine who are COVID-19 positive and allow review of the blood results to better inform an ongoing management guideline.

This guideline will be reviewed regularly as more information becomes available regarding COVID-19 positive presentations for people taking clozapine.

References:

1. Gee S, Taylor D. COVID-19 infection causes a reduction in neutrophil counts in patients taking clozapine. J Psychiatry Neurosci 2021;46(2)

2. Cranshaw T, Harikumar T. COVID-19 Infection May Cause Clozapine Intoxication: Case Report and Discussion. Schizophrenia Bulletin vol. 46 no. 4 pp. 751, 2020 doi:10.1093/schbul/sbaa070 Advance Access publication 21 May 2020

3. Tio NT, Schulte PFJ, Martens HJM. Clozapine Intoxication in COVID-19. AM J Psychiatry 178:2, February 2021

For more information

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