

Adult Antipsychotic Monitoring (Excluding Clozapine) and COVID-19

This information sheet gives advice on monitoring antipsychotics during the COVID-19 pandemic.

General guidance on the management of medicines to treat mental health conditions during COVID-19 is available from the [Royal College of Psychiatrists](#), [specialist pharmacy services](#) and [NCL website](#).

Antipsychotic monitoring aims to improve collaborative and effective physical health monitoring of patients experiencing severe mental illness. Guidance for North Central London exists in the form of a [factsheet](#). There are roughly 14,000 patients using oral antipsychotics in NCL.

Careful consideration should be given to whether now is the best the time to start an antipsychotic medication. In some circumstances this may be unavoidable due to clinical need but the clinical rationale should be carefully documented and arrangements for monitoring put in place.

General guidelines and precautions

Normal monitoring recommendations for antipsychotics are:

| Frequency Parameter | Baseline | First 6 months of treatment | Annual Check-up | Comments: |
|---|----------|-----------------------------|-----------------|--|
| Glycosylated haemoglobin (HbA1c) | ✓ | ✓ | ✓ | Increase frequency if evidence of elevated levels. Monitor fasting glucose and/or HbA1c: <ul style="list-style-type: none"> at 12 weeks, at 6 months, at 1 year, annually thereafter |
| Blood Lipids (Total cholesterol, non-HDL, HDL, triglycerides) | ✓ | ✓ | ✓ | Increase frequency if evidence of elevated levels. Non-fasting samples are satisfactory for most measurements except for triglycerides Monitor lipids: <ul style="list-style-type: none"> at 12 weeks, at 6 months at 1 year, annually thereafter |

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|--------------------------------------|--|--|---|---|
| FBC | ✓ | ✗ | ✓ | Repeat FBC if there are signs and symptoms of a blood dyscrasia |
| LFTs | ✓ | ✗ | ✓ | Repeat LFTs if there are signs of liver toxicity |
| U&Es & Renal Function | ✓ | ✗ | ✓ | |
| TFTs | <p>Baseline and annual check-up only required for patients with bipolar affective disorder & 6 monthly for rapid-cycling bipolar affective disorder.</p> <p>Quetiapine is associated with small (clinically insignificant decreases in thyroid hormones so annual monitoring may be advisable)</p> | | | |
| CPK | ✓ | ✗ | ✗ | Repeat if there are signs and symptoms of NMS |
| Prolactin | ✓ | Consider repeating level 6 - 12 months after initiation. Amisulpride, Risperidone and the Typical Antipsychotics are associated with hyperprolactinaemia. Repeat if there are signs of raised prolactin. | | |
| ECG | ✓ | Where possible offer all patients an annual ECG, especially where other risk factors exist. Baseline ECG for all patients especially if there are specific CV risk factors e.g. high BP. During therapy the need for ECG monitoring should be assessed on an individual patient basis. | | |
| BP & Pulse | ✓ | See comments | ✓ | Monitor BP during titration if there are risk factors for postural hypotension e.g. older adults |
| Weight & BMI | ✓ | ✓ | ✓ | <p>Monitor weight:</p> <ul style="list-style-type: none"> • weekly for the first 6 weeks, • at 12 weeks, • at 1 year, • annually thereafter |
| Smoking Status | ✓ | ✓ | ✓ | May interact with antipsychotic metabolism |
| Side Effects | ✓ | ✓ | ✓ | If concerned about side effects an optional tool to determine if the patient is suffering from excessive side effects from antipsychotic medication is the Glasgow antipsychotic side effect scale (GASS) |

During the COVID-19 pandemic, recommendations are:

- If patients are not in the at-risk category (defined below) then monitoring intervals can be extended by up to 6 months. However, patients must keep in good physical health and should resume regular monitoring intervals as soon as possible and safe to do so.
- If patients are in the at-risk category (defined below) then their normal monitoring interval should be continued. Some measurements such as weight and blood pressure can be self-monitored. If they live or have had contact with someone who has symptoms, their monitoring can be delayed for 14 days from the day their symptoms started unless there is urgent clinical need.

At-risk patients are defined as:

- Have received less than 6 months treatment
- Elderly (> 65 years)
- Renal impairment (Recent unstable renal function (under investigation in last 3 months, eGFR < 60ml/min)
- Hepatic impairment (chronic alcohol use, liver disease)
- High risk of cardiovascular disease

For patients with COVID-19 symptoms (new cough and/or fever), recommendations are:

- If patient does not have symptoms of a cardiovascular event (CVE) (chest pain, shortness of breath,) new severe extrapyramidal side effects (EPSE), or Neuroleptic Malignant Syndrome (NMS) (Fever, diaphoresis, rigidity, confusion, fluctuating consciousness, fluctuating blood pressure, tachycardia), then continue antipsychotic. If patient is 'at-risk', then patient should wait for 7 days, until temperature subsides and patient becomes non-infectious, to complete monitoring, unless there is urgent clinical need.
- If patient has symptoms of CVE, new severe EPSE, or NMS, then withhold antipsychotic and send patient to A&E. The clinician needs to call ahead to advise of isolation status and seek advice, it may be necessary to call 999.
- Advise patients to maintain their fluid intake and if needed to consider over-the-counter paracetamol as a first treatment option for fever or pain.

Pneumonia

Almost 1 in 5 deaths in schizophrenia are attributable to respiratory disease, with mortality from pneumonia 3.8 times that of the general population (1). Antipsychotics are associated with pneumonia (2). Higher doses and antipsychotic polypharmacy confer even greater risk (2). Some studies have also found the risk to be highest in the period immediately following antipsychotic initiation (3). Other medications that increase the risk of pneumonia include

inhaled corticosteroids and sedative drugs (4), the latter of which may be particularly likely to be co-prescribed to those with serious mental illness.

Comorbid medical conditions that also increase the risk of pneumonia include dementia, COPD, bronchitis, asthma, cardiovascular disease, heart failure, cerebrovascular disease, stroke, Parkinson's disease, multiple sclerosis, diabetes, cancer, chronic hepatic or renal disease and dysphagia (5). Many of these are common comorbidities in people with schizophrenia or may be exacerbated by the side effects of antipsychotic drugs, including clozapine.

Whether there is a causal link between antipsychotics and pneumonia, or independent factors associated with serious mental illness that increase the risk, or a combination of both is unclear. The risk of aspiration may be increased by several factors such as agitation, and by antipsychotics themselves (through hypersalivation, sedation, impairment of swallowing and cough reflexes or EPSEs). Poor self-care may result in delays in seeking help for respiratory symptoms (3), and smoking is well known to increase the risk of acute pneumonia (6).

There are currently no data exploring any relationship between antipsychotics or schizophrenia and the risk of contracting COVID-19 or developing severe symptoms to the infection. In the absence of data it should be assumed that patients taking antipsychotics, particularly where co-morbidities exist, may be at particular risk from COVID-19 and associated pneumonia.

Diabetes

Antipsychotics are linked to hyperglycaemia, impaired glucose tolerance and diabetic ketoacidosis (7). The risk is further compounded by lifestyle factors (obesity, poor diet and exercise) and a family history.

Diabetes, in addition to cerebrovascular and cardiovascular disease, is one of the comorbidities found in patients who die from or suffer severe symptoms of COVID-19 (8). Patients with COVID-19, in common with other infections, are likely to experience fluctuations in blood glucose levels. There are as yet no data describing blood glucose levels in patients taking antipsychotics who have COVID-19 infection, but it should be assumed that glucose levels are likely to fluctuate.

Further recommendations:

- Patients who have cerebrovascular disease, cardiovascular disease, diabetes, or who have had multiple respiratory infections requiring antibiotic treatment in the previous 6–12 months are assumed to be at higher risk of severe complications of COVID-19. Optimise management of these conditions.
- Patients who smoke should be strongly encouraged to stop. Remember that a reduction in smoking will increase some antipsychotics (Olanzapine, Haloperidol, Fluphenazine, and Chlorpromazine) plasma levels and possibly require a dose

reduction. Stopping smoking may also affect other medications. For support on dose adjustment contact the patient's usual mental health team or if not under a mental health team contact the practice based mental health team or assessment teams.

Contacts

For Further support and advice:

Barnet, Enfield and Haringey

Inpatient and mental health services: Ward Pharmacist or contact pharmacy department beh-tr.stannsparmacy@nhs.net Tel: 0208 702 5435

Acute trust: Psychiatric Liaison teams (RFH -Barnet and Chase Farm Sites, NMUH)

Camden & Islington

Inpatient and mental health services: Ward Pharmacist or contact pharmacy department pharmacy@candi.nhs.uk Tel: 0207 561 4104/3

Primary Care:

Camden: Camden Primary Care Mental Health Network (C-PCMHN) cim-tr.cpcmh@nhs.net

Islington: Practice based mental health team (PBMHT) cim-tr.pbmhs@nhs.net

Tele: 020 3317 7300/7513

Acute trust: Psychiatric Liaison teams (UCLH, RFH, Whittington Health)

References

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