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NICE Bites

Schizophrenia

NICE CG82; 2009

This guideline relates to adults (18 years and older). For information on early detection and intervention, and for recommendations on **psychological and psychosocial interventions**, see the full guideline.

Treatment and management

First and acute episodes of schizophrenia

- Urgently refer anyone presenting with psychotic symptoms in primary care to an appropriate specialist team.
- If a GP needs to start antipsychotics they should have experience in treating and managing schizophrenia.
- Use an oral antipsychotic for people with newly diagnosed schizophrenia.
- Decide which drug to use together with the patient, and carer if appropriate. §
- Consider the benefits and risks of each antipsychotic including the relative potential of each to cause side effects such as:
  - extrapyramidal effects e.g. akathisia,
  - metabolic effects e.g. weight gain,
  - unpleasant subjective experiences.

§ **Editorial note –** This guidance replaces NICE TA43 which recommended atypical antipsychotics first-line; this recommendation no longer stands. Note: BNF 57 does not include the updated guidance.

Prescribing

- Start with a dose at the lower end of the licensed range and titrate upwards slowly within the dose range in the BNF or Summary of Product Characteristics (SPC).
- **Do NOT** use a loading dose of an antipsychotic.
- Carry out a trial at the optimum dose for 4–6 weeks.
- **Do NOT** prescribe regular combined antipsychotics, except for short periods (e.g. when changing medication).
- Review prn antipsychotics regularly e.g. weekly, and check whether the dose taken has increased above the maximum in the BNF/SPC.

Rapid tranquillisation

- Consider rapid tranquillisation for people who pose an immediate threat to themselves or others during an acute episode.
- Follow the recommendations in the relevant guidance:
  - 'Violence' (NICE CG25) if facing imminent violence,
  - 'Self-harm' (NICE CG16) if facing acts of self-harm.

Maintenance treatment

Do **NOT** use intermittent dosing strategies unless the patient will not accept continuous maintenance treatment or if it is contraindicated.

Depot/long-acting injectable antipsychotics

- Use depot/long-acting injectable antipsychotics when:
  - the patient would prefer this after an acute episode,
  - avoiding covert non-adherence to medication is a clinical priority.
- When starting treatment:
  - consider the preferences and attitudes of the patient towards regular intramuscular injections and their delivery (e.g. home visits, location of clinics),
  - consider the benefits and risks of each antipsychotic,
  - initially use a small test dose as in the BNF/SPC.

Monitoring

Pre-treatment

An electrocardiogram (ECG) is needed if:

- specified in the SPC,
- there is a personal history of cardiovascular disease,
- cardiovascular risk is identified e.g. hypertension,
- the person is admitted as an inpatient.

During treatment

- Record the indications, expected benefits and risks, and expected time-frame for a change in symptoms and for side effects to occur.
- Justify and record reasons for doses outside the range specified in the BNF or SPC.
- Monitor and record the following regularly throughout treatment, but especially during titration:
  - efficacy, including changes in symptoms and behaviour,
  - side effects,
  - adherence,
  - physical health.
- Record the rationale for continuing, changing or stopping medication and the effects of such changes.

Cautions and counselling

Discuss the following with the patient:

- any non-prescribed treatments including complementary therapies,
- prescription and non-prescription medicines,
- use of alcohol, tobacco and illicit drugs.

Inadequate response to treatment

- Review the diagnosis.
- Check adherence to antipsychotics.
- Review psychological treatments.
- Consider other causes of non-response.

Use clozapine if symptoms have not responded adequately despite sequential use of at least two different antipsychotics, including a non-clozapine second-generation antipsychotic.

If there is inadequate response to clozapine, follow the steps above then check clozapine levels before adding a second antipsychotic to augment clozapine. Choose a drug that does not compound the side effects of clozapine. An adequate trial of augmentation may need to be up to 8 to 10 weeks.

Withdrawal

- Inform the patient of the high risk of relapse if medication is stopped within 1-2 years.
- If withdrawing antipsychotic medication do so gradually.
- Regularly monitor for signs and symptoms of relapse for at least 2 years after withdrawal.

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Chronic Kidney Disease

NICE CG73; 2008

For details of who to test for CKD (including those on nephrotoxic drugs e.g. lithium, calcineurin inhibitors and long-term NSAIDs), how to assess them and how to identify progressive CKD, see the full guideline.

Definition of terms

ACEIs	angiotensin converting enzyme inhibitors
ACR	albumin:creatinine ratio
ARBs	angiotensin II receptor blockers
CKD	chronic kidney disease
CV disease	cardiovascular disease
eGFR	estimated glomerular filtration rate
ESA	erythropoiesis-stimulating agent
Hb	haemoglobin
NSAIDs	non-steroidal anti-inflammatory drugs

Testing kidney function - use eGFR and serum creatinine.

Testing for proteinuria - use ACR.

Testing for haematuria - use reagent strips.

Treatment and management

Lifestyle advice

- Diet - a detailed dietary assessment by an appropriately trained professional may be needed.
- Encourage regular exercise, a healthy weight and smoking cessation.

Manage complications

CKD often occurs with other conditions - aim to reduce or prevent these complications.

CV disease risk

- Use statins for primary prevention in the same way as in people without CKD.
- Use statins for secondary prevention irrespective of baseline lipid values.
- Use antiplatelet drugs for secondary prevention:
  - low dose aspirin can be used,
  - people with CKD given multiple antiplatelet drugs have an increased risk of minor bleeding.

Bone conditions

Bisphosphonates appear to have benefits in people with CKD without an increased risk of adverse effects:

- use when needed for the prevention and treatment of osteoporosis in people with stage 1, 2, 3A or 3B CKD,
- check the Summary of Product Characteristics for any recommendations on dose adjustment according to GFR.

When needed, give vitamin D supplementation as follows:

- stage 1, 2, 3A or 3B CKD - cholecalciferol or ergocalciferol,
- stage 4 or 5 CKD - alfacalcidol or calcitriol.

Table 1: Stages of CKD

Stage*	Description	eGFR** ml/min/1.73m^2
1	Normal or increased GFR with other evidence of kidney damage.	≥90
2	Slight decrease in GFR with other evidence of kidney damage.	60-89
3A	Moderate decrease in GFR with or without other evidence of kidney damage.	45-59
3B		30-44
4	Severe decrease in GFR, with or without other evidence of kidney damage.	15-29
5	Established renal failure.	<15

*Use suffix 'p' to denote presence of proteinuria
**Multiply by 1.21 for people of African-Caribbean or African ethnicity

Blood pressure (BP)

- Aim to keep the systolic BP <140 mmHg (target range 120-139 mmHg) and diastolic BP <90 mmHg.
- In people with diabetes and CKD, or if the ACR is ≥70 mg/mmol, aim to keep systolic BP <130 mmHg (target range 120-129 mmHg) and diastolic BP <80 mmHg.

Choice of antihypertensives in CKD

For people without diabetes, who have hypertension, and an ACR <30 mg/mmol, follow general NICE guidance on the treatment of hypertension (see NICE CG34).

Use ACEIs first-line (or ARBs if ACEIs not tolerated) in people with:

- No diabetes AND:
  - hypertension and an ACR ≥30 mg/mmol OR
  - an ACR ≥70mg/mmol with or without hypertension/CV disease.
- Diabetes and an ACR >2.5 mg/mmol (men) or >3.5mg/mmol (women), with or without hypertension.

Titrate ACEIs/ARBs to maximum tolerated dose before adding another antihypertensive.

Monitoring ACEI/ARB treatment

Test eGFR and serum potassium before starting treatment, 1-2 weeks later and after each dose increase.

Potassium

- Monitor more frequently if the patient is taking other drugs that cause hyperkalaemia.
- If serum potassium > 5.0mmol/l:
  - do NOT start ACEIs/ARBs,
  - investigate and treat other factors known to cause hyperkalaemia then recheck serum potassium.
- If serum potassium ≥ 6.0mmol/l: **STOP** ACEIs/ARBs.

eGFR and serum creatinine

- If there is a decrease in eGFR <25% or an increase in serum creatinine <30%:
  - do NOT change dose,
  - repeat test after 1-2 weeks.
- If the eGFR decrease is ≥25% or serum creatinine increase ≥30%:
  - investigate other causes,
  - if no other cause: stop ACEI/ARB or reduce dose,
  - add alternative antihypertensive if required.

Cautions and counselling

Inform patients of the importance of:

- achieving the optimal tolerated dose,
- monitoring eGFR and serum potassium.

Test for anaemia - check Hb in people with stage 3B, 4 and 5 CKD to identify anaemia.

Anaemia management in people with CKD

NICE CG39; 2006

- Consider treating anaemia when Hb ≤11g/dl (adults).
- Start treatment with an ESA if it is likely to improve quality of life and physical function.
- ESAs are considered equivalent in terms of efficacy.
- Check iron status. Do NOT start ESAs without also managing iron deficiency.
- Monitor Hb every 2-4 weeks (induction phase) or 1-3 months (maintenance phase).
- Adjust ESA dose and frequency:
  - to keep rate of Hb increase between 1-2g/dl/month,
  - to maintain stable Hb between 10.5-2.5g/dl (adults).