journey to change

NHS
Tees, Esk and Wear Valleys
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MSS 35: Management of Extra-Pyramidal Side-Effects

Drug induced extrapyramidal symptoms

- When prescribing antipsychotics consider the risk of extra-pyramidal side-effects (EPSE); they can be distressing or disabling for the patient, add to stigma associated with their illness and often lead to non-compliance.
- In elderly / frail patients the anticholinergic effect increases risk of falls due to side-effects of blurred vision, dizziness, confusion, disorientation
- Consider a reduced dose or an alternative antipsychotic to reduce the risk / impact of EPSE on the patient
- When prescribed anticholinergics, review ongoing need regularly and consider de-prescribing; most patients don't need long term treatment.

Reference 1	Acute Dystonia	Pseudo parkinsonism	Akathisia	Tardive dyskinesia
Symptoms	Uncontrolled muscle spasm in any part of body. Patient may be unable to swallow or speak clearly. Painful and very frightening	Tremor or rigidity Bradykinesia / Bradyphrenia / Salivation Differential diagnosis – depression / negative symptoms schizophrenia	Subjectively unpleasant state of inner restlessness with desire / compulsion to move. Akathisia can be mistaken for psychotic agitation and linked with suicidal ideation and aggression.	Abnormal involuntary movements e.g. Lip smacking / chewing / tongue protrusion
Prevalence	About 10% but more common in: • Young male • Antipsychotic naïve • High potency antipsychotic e.g. haloperidol Dystonic reactions rare in elderly	About 20% but more common in: • Elderly females • Pre-existing neurological damage	Approximately 25% patients prescribed 1st generation antipsychotics. Lowest incidence with olanzapine, quetiapine and clozapine.	5% of patients per year of antipsychotic exposure. Increased risk with age, affective illness, schizophrenia, higher doses, acute EPSE early in treatment.
Time to develop	Acute dystonia occurs within hours of starting antipsychotic (minutes with IM route)	Days to weeks after starting or dose increase of antipsychotic	Within hours or weeks of starting antipsychotic or dose change.	Months to years

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Treatment	• **Prescribe oral procyclidine 5 to 10 mg as single dose *(Frail/elderly patients 5 mg*)** • Consider IM route if unable to swallow or severe symptoms requiring rapid treatment. • Response to IM administration takes around 20 minutes. • Always consider procyclidine PRN when prescribing haloperidol to antipsychotic naive patients or as rapid tranquilisation	• Reduce antipsychotic dose • Switch to antipsychotic with lower risk • **Prescribe oral procyclidine 2.5 mg three times a day (every 4 hours).** Increase in steps of 2.5 mg daily as needed to control symptoms. Max. dose in 24 hours = 30 mg • ***Use lower doses in older / frailer patients*** • Avoid prescribing procyclidine at night, symptoms are usually absent during sleep. Anticholinergics can cause insomnia. • Review regularly, aim for short treatment courses to manage specific symptoms. Consider gradual discontinuation after 3 months, re-starting if symptoms re-appear. • Trihexyphenidyl is alternative if procyclidine not effective or tolerated, but is significantly more expensive (see ***SAV£R*** information in December 25 MOMM)	• Reduce antipsychotic dose • Switch to antipsychotic with lower risk • Prescribe low dose propranolol (unlicensed) and review response regularly. Beware risk of propranolol in overdose. • Anticholinergics generally unhelpful and unlicensed Register of approved off-label & unlicensed use of medicines.xlsx	• Stop anticholinergic (if prescribed) • Reduce antipsychotic dose • Switch to antipsychotic with lower risk • Clozapine (and quetiapine) most likely to help symptoms.

What increases risk of developing EPSE?

- 1st-generation antipsychotics e.g. haloperidol
- Higher doses of antipsychotics, especially greater than licensed doses, (except clozapine and quetiapine)
  - Can the effective dose be reduced to prevent EPSE?
- Patients who develop one EPSE are more likely to develop others.
- Concurrent substance misuse
- May be genetically determined

What are the risks with anticholinergic treatment

- Blurred vision, dizziness, confusion and disorientation which may increase falls risk especially in patients over 65 years, who have increased risk mortality with anticholinergic use.
- For patients with existing cognitive impairment monitor for changes**.** Consider anticholinergic burden[3] (score =3).
- Risk of tolerance with prolonged treatment. Abrupt withdrawal can produce cholinergic rebound. Gradual reduction over 4 weeks recommended.
- Abuse potential reported

Link to Patient Information on EPSE and individual medications handyfactsheetepsesuk.pdf

Children and Young People: see BNFc for dose recommendations. Management of dystonia in children unlicensed Register of approved off-label & unlicensed use of medicines.xlsx

References: 1. Maudsley Prescribing Guidelines in Psychiatry 15th edition; 2. Van Harten et al. Acute dystonia induced by drug treatment. BMJ 1999; 319: 623-626 PubMed Central - Acute dystonia induced by drug treatment; 3. Assessing Medication for Anticholinergic burden Medichec