Managing Side Effects
Adapted from An Antipsychotic Roundup: New Agents and Safety Updates
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<table>
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<th>Side effect</th>
<th>Clinical pearls</th>
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| Extrapyramidal Side Effects (EPS) | Abnormal motor movements  
30% will develop on FGA  
Confirm diagnosis and monitor to prevent AIMS (abnormal involuntary movement scale) |
| Acute Dystonias        | Painful prolonged muscle contractions  
Dose initiation or change (24-72 hours)  
Risk: high potency/dose FGA, younger, males  
Treatment: anticholinergics or benzodiazepines (IM) |
| Pseudoparkinsonism    | Akinesia, bradykinesia, difficulty initiating movement, slowness, masked facial expression, micrographia, slowed speech, decreased arm swing  
Tremor, pill rolling, cogwheel rigidity, postural and oral abnormalities  
1-2 weeks after initiation/dose change  
Risk: Increased age, female  
Treatment: Anticholinergics (i.e. diphenhydramine, others) |
| Tardive Dyskinesia    | Abnormal involuntary movements; worsen with stress, disappear during sleep tongue thrusting, chewing movements, lip smack, grimacing, limb twisting, rocking  
Late onset; often irreversible  
Risk: old age, females; duration of therapy, dose (daily & cumulative), duration  
Treat: Prevention and education is key; switching APS (clozapine); use of Ingrezza  
Caution: Anticholinergics MASK symptoms |
| Akathisia             | Internal and external restlessness; pacing, shifting, shuffling, feet tapping, compulsion to stay in motion  
Risk: high potency FGAs, risperidone & paliperidone  
Treatment: decrease dose, B-Blockers |
| Anticholinergic       | Highest risk with low potency FGA, clozapine and olanzapine  
Dry mouth, constipation, urinary retention, blurred vision, tachycardia, impaired memory  
Constipation from slowed peristalsis and can develop into paralytic ileus or even bowel perforation (bowel preps) |

Reference(s): Clinical Pharmacology (online database). Tampa, FL: Gold Standard, Inc; 2013.
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<td>Neuroleptic Malignant</td>
<td>Rare, potentially lethal High potency drugs (but possible with all APS, including clozapine) Injectable depot FGAs</td>
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| Syndrome (NMS)              | Patients at risk: • Dehydrated • Organic mental disorder | • Onset: any point; early to months later  
|                             |                                                                              | • Develops rapidly 24-72 hrs  
|                             |                                                                              | • Hyperreflexia and or pyrexia/Labile Blood Pressure  
|                             |                                                                              | • Confusion  
|                             |                                                                              | • Increased Muscle Tone/Rigidity  
|                             |                                                                              | • Increased WBC, CPK, LFTs |

**Treatment:**
- Discontinue antipsychotic (DA agonists-bromocriptine, etc)

**Rechallenge:**
- Acceptable in most with observation for at least 2 weeks
- Different SGA or low potency FGA, slow dose titration

**DRESS:** Discontinuation of offending agent and supportive care; confirmation diagnosis (eosinophils, etc)