Falls and Parkinson’s

This is a brief clinical summary on falls in Parkinson’s, designed for clinicians caring for people with the disorder. This document outlines Parkinson’s specific modifiable factors and evidence-based interventions.

Risk factors and interventions for falls in older people (non-Parkinson’s population) are not covered but signposted below. The summary is supported by a series of Critically Appraised Topics (CATs), which are available on the UK Parkinson’s Excellence Network online resource centre. These documents address three of the challenges identified in the 2015 UK Parkinson’s Audit:

(1) Integrated services;
(2) Standardised practices; and
(3) Prevention of infections and falls.

The summary was devised in November 2016 and will be updated in 2019.

1. Identify patients who are falling or at risk of falling in clinic:

   • Ask about falls and their frequency, context and characteristics
   • Use the simple clinical tool to predict falls (see Falls Assessment CAT)

2. Rule out generic elderly falls factors and intervene appropriately (see NICE guidelines: www.nice.org.uk/guidance/cg161)

   • Cardiac causes
   • Orthostatic Hypotension
   • Cognitive impairment
   • Fear of falling / depression / anxiety
   • Gait and balance impairment, including focal neurology
   • Muscle weakness
   • Arthrosis
   • Visual impairment / footwear
   • Urinary incontinence
   • Medication use (especially sedatives, psychotropic medications and cholinergic burden) and polypharmacy
   • Home hazards
   • Alcohol use
### 3. Rule in PD-specific falls factors

<table>
<thead>
<tr>
<th>Factor</th>
<th>Assessment</th>
<th>Intervention</th>
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<tbody>
<tr>
<td>Freezing of gait</td>
<td>Ask patient FOG questionnaire Rapid 360° turn Walking and talking OT home assessment</td>
<td>Cueing and cognitive gait strategies Environmental adaptation such as use of visual cues Optimise dopaminergic medications (ensure adherence)</td>
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<tr>
<td>Slow shuffling gait</td>
<td>Examine walking speed and gait</td>
<td>Optimise dopaminergic medications (ensure adherence) Cueing techniques Muscle strength training</td>
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<tr>
<td>Undertreated motor symptoms</td>
<td>Examination UPDRS, H&amp;Y</td>
<td>Optimise dopaminergic medications (ensure adherence)</td>
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<tr>
<td>Dyskinesias</td>
<td>History Examination Home diary</td>
<td>Optimise dopaminergic medications Consider amantadine Consider continuous dopaminergic stimulation</td>
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<tr>
<td>Postural instability</td>
<td>Pull test Berg Balance Scale</td>
<td>Progressive resistance strength training Movement strategy training Tai Chi Turning strategies</td>
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<tr>
<td>Transfers</td>
<td>Examination of transfers OT home assessment Lying and standing blood pressure</td>
<td>Transfer training Home adaptations and equipment Rationalise antihypertensives; increase fluid intake; compression stockings / abdominal binding; consider fludrocortisone / midodrine</td>
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<tr>
<td>Parkinson's-specific cognitive impairment / impulsivity</td>
<td>History from patient and carer Montreal Cognitive Assessment</td>
<td>Review and rationalise medications Minimise hazardous behaviour Consider cholinesterase inhibitors Involve carers Cueing strategies</td>
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### 4. Consider unmodifiable factors

Not all causes of falls are modifiable i.e. age, gender, disease stage.

### 5. Assess osteoporosis risk


### 6. Reassess the interventions
This clinical summary, and the related Critically Appraised Topics are the work of the Evidence-Based Practice Theme Working Group:

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The UK Parkinson’s Excellence Network is the driving force for improving Parkinson’s care, connecting and equipping professionals to provide the services people affected by the condition want to see.

The tools, education and data it provides are crucial for better services and professional development.

The network links key professionals and people affected by Parkinson’s, bringing new opportunities to learn from each other and work together for change.

Visit parkinsons.org.uk/excellencenetwork