CASE STUDY

Mrs. Booker

Mrs. Booker is a 76-year-old woman who lives independently in her own home. She has come in to your primary care clinic for a wellness visit.

Self-Assessment

Mrs. Booker completes the Stay Independent brochure in the waiting room. She circles “Yes” for the statements, “I have fallen in the last 6 months,” and “I take medicine to help me sleep or improve my mood.” Her responses result in a risk score of 3.

Medical History

When asked, Mrs. Booker reports she fell the previous week, but wasn’t hurt, so she didn’t seek medical attention. She says she was out walking with a friend. They were talking and she wasn’t looking where she was going, and she tripped over a crack in the sidewalk. This was her first fall.

Mrs. Booker reports that she usually walks about 2 miles each day around her neighborhood. She feels steady when walking at all times, even when outdoors. She tries to avoid potholes and usually watches out for cracks in the sidewalk so she won’t trip. She’s not afraid of falling. Walking is her only form of exercise.

Risk score: 3

ASSESSMENT

Gait, Strength, and Balance
(Completed and documented by the medical assistant)

Timed Up and Go:
10 seconds
Gait: decreased arm swing, but otherwise normal

30-Second Chair Stand:
14 Stands
Able to rise from the chair without using her arms to push herself up

4-Stage Balance Test:
10 seconds, full tandem stance
Able to hold a full tandem stance for 10 seconds unsupported without postural sway
### Medications

<table>
<thead>
<tr>
<th>Medication</th>
<th>Dosage</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Divalproex sodium DR</td>
<td>250 mg</td>
<td>daily</td>
</tr>
<tr>
<td>Olanzapine</td>
<td>15 mg</td>
<td>daily</td>
</tr>
<tr>
<td>Lorazepam</td>
<td>.5 mg</td>
<td>2x daily</td>
</tr>
<tr>
<td>Levothyroxine</td>
<td>75 mcg</td>
<td>daily</td>
</tr>
<tr>
<td>Docusate</td>
<td>200 mg</td>
<td>daily</td>
</tr>
<tr>
<td>Acetaminophen</td>
<td>500 mg</td>
<td>4x daily</td>
</tr>
</tbody>
</table>

### PROBLEM LIST
- Poor vision
- Orthostatic hypotension
- Seizure disorder
- Hypothyroidism
- Schizoaffective disorder
- Chronic kidney disease (stage 3)

### Physical Exam

<table>
<thead>
<tr>
<th>Constitutional</th>
<th>Well-developed, well-nourished, irritable but cooperative with exam.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vitals</td>
<td>130/91, 107; Sitting – 138/78, 107; Standing – 146/95, 15. BMI 21.0.</td>
</tr>
<tr>
<td>Head</td>
<td>Normocephalic/traumatic.</td>
</tr>
<tr>
<td>ENMT</td>
<td>Acuity with corrective lenses: 20/30 R, 20/40 L.</td>
</tr>
<tr>
<td>CV</td>
<td>Regular rhythm, tachycardic S1/S2 without murmurs, rubs, or gallops.</td>
</tr>
<tr>
<td>Respiratory</td>
<td>Clear to auscultation bilaterally.</td>
</tr>
<tr>
<td>GI</td>
<td>Normal bowel tones, non-tender, non-distended.</td>
</tr>
<tr>
<td>Musculoskeletal</td>
<td>UE strength 5/5 bilaterally; LE strength 5/5 throughout except 4-/5 at bilateral hip flexors. No knee joint laxity. Foot exam shows no calluses, ulcerations, or deformities.</td>
</tr>
<tr>
<td>Tone/abnormal movements</td>
<td>No tremor, bradykinesia, or rigidity. Sensation, proprioception, and DTRs normal.</td>
</tr>
<tr>
<td>Psych</td>
<td>PHQ-2 = 0/6.</td>
</tr>
</tbody>
</table>

### REVIEW OF SYMPTOMS
- Positive for poor eyesight
- Urinary incontinence
- Nocturia > 2 times a night
Identified Fall Risk Factors

Mrs. Booker’s answers on the *Stay Independent* brochure indicate she has fallen in the past year. The results of the assessment tests indicate that her gait speed is somewhat slower than normal, but her balance and strength tests are both within normal limits. She:

- Takes three psychoactive medications: divalproex, olanzapine, and lorazepam.
- Has issues with incontinence and gets up during the night to void.
- Complains of vision problems.

Fall Prevention Recommendations

1. Attempt to stop, switch, or reduce psychoactive medications.
2. Consider non-pharmacologic options for symptom and condition management.
3. Implement strategies to address urinary symptoms.
4. Recommend at least 800 IU of vitamin D as a daily supplement for fall risk reduction.
5. Discuss fall prevention, tailoring suggestions based on the “Stages of Change” model. Emphasize that a fall is not simply “bad luck” or an “accident.”
6. Provide the *Chair Rise Exercise* handout and suggest she begin doing this exercise daily.
7. Recommend night lights, or leaving hall and/or bathroom lights on overnight to reduce the risk of falling when getting up to void.
8. Recommend having grab bars installed inside and outside the tub or shower.
9. Provide the CDC fall prevention brochures, *What YOU Can Do to Prevent Falls* and *Check for Safety*.
10. Refer to a community exercise, fitness, or fall prevention program to optimize leg strength and balance by including strength and balance exercises as part of her exercise routine.
11. Refer to an eye specialist for eye exam and updated prescription. Suggest she discuss with her eye specialist getting a pair of single lens distance glasses for walking outside.

CDC’s STEADI tools and resources can help you screen, assess, and intervene to reduce your patient’s fall risk. For more information, visit [www.cdc.gov/steadi](http://www.cdc.gov/steadi).