THE UNIVERSITY OF ARIZONA
Arizona Center on Aging
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January 2023

ELDER CARE

A Resource for Interprofessional Providers

Akathisia in Older Adults

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Akathisia is an extra-pyramidal movement disorder characterized by a need to be in constant motion. Patients exhibit movements including rocking while sitting or standing, lifting the feet as if marching while standing, or crossing and uncrossing the legs while sitting in a chair.

Cause

One of the most common adverse effects caused by psychiatric medications, Akathisia is particularly related to antipsychotic drugs. Although the Food and Drug Administration has issued a black-box warning about the risks of prescribing antipsychotic medications in older adults, an estimated 40% of older adults with dementia living in nursing homes and residential care facilities are nonetheless prescribed antipsychotic drugs prescribed primarily in an attempt to control agitation and behavioral symptoms related to dementia.

It is thought that dopamine blockade is involved in the etiology of akathisia because it occurs with both first-generation and second-generation antipsychotics, and both classes of antipsychotic drugs block dopaminergic function.

Presentation

Akathisia can be a symptom, or a sign. If a clinician observes the abnormal movements, the diagnosis can be straightforward if the patient is taking antipsychotic drugs, (particularly high-potency first-generation neuroleptics like fluphenazine or haloperidol.)

The subjective presentation, however, can be a diagnostic challenge in older adults because there are few subjective states to compare it to, often leaving patients at a loss for words to describe their symptoms. Therefore, patients with mild akathisia, who may have no obvious movement disorder when seen by their clinician, may simply not report it, or they might just report anxiety or itching. Patients with more severe symptoms, however, may be more specific in their description and state that they are "crawling out of their skin," "have bugs under their skin," or "can't stay still." However, those with cognitive impairment, such as those with dementia, may not be able to describe it at all.

Clinical Ramifications

The severity of akathisia can range from mild to intolerable. Patients with severe akathisia can be dysphoric (a profound state of unease or sadness) or become depressed to the point of wanting to commit suicide. Violence and aggression can also occur, often in older adults with dementia; families and caretakers should be informed of that possibility.

Diagnosis

The key to identifying drug-induced akathisia is to be on the alert for reports or observations of changes in a patient's movements. It is best to observe patients when they are not aware they are being watched.

Keep in mind that there are other conditions that can mimic akathisia. Anxiety disorders are an example. If a person with an anxiety disorder has noticeable extraneous movements, these movements are usually in the upper extremities or face, which is not typical of akathisia. People with anxiety may, however, have foot tapping, which can also occur in akathisia. Other medical conditions may also cause agitation that can be confused with akathisia (Table 1). But, none of them have the lower-extremity involvement typically seen in akathisia, nor a need to move, nor relief with movement as in patients with akathisia. There are also reports of akathisia occurring with other medications, such as metoclopramide, erythromycin, and venlafaxine.

Table 1. Medical Conditions Causing Agitation That Can Be Confused With Akathisia

Acute coronary event	Hyponatremia
Delirium	Sedative or Alcohol Withdrawal
Head trauma	Sepsis
Hypoxia	Sleep deprivation
Hyperthyroidism	

TIPS FOR DEALING WITH AKATHISIA IN OLDER ADULTS

- If antipsychotic medications are prescribed for older adults, use the lowest possible dose and consider using a lower-potency agent.
- Be alert for development of akathisia when patients are started on antipsychotic medications as symptoms can initially be subtle, and patients may not report them or be able to effectively describe them.
- If akathisia develops in a patient taking antipsychotic medications, lower the dose. If the patient is taking a first-generation antipsychotic medication, try switching to an atypical (second-generation) antipsychotic.

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Still other conditions that can be confused with akathisia are discrete movement disorders. Table 2 lists such disorders and how to distinguish them from akathisia.

Table 2. Movement Disorders That Can Be Confused With Drug-Induced Akathisia
Dystonia Induced by antipsychotic drugs. Occurs within 24-48 hours after starting the drug or increasing the dose. Dystonia tends to involve the eyes, whereas akathisia does not.
Tardive Dyskinesia (TD) Induced by antipsychotic drugs but occurs late in the course of treatment. TD presents with writhing athetoid or choreo-athetoid movement involving the lower face and the hands, feet, and toes. Severe TD can involve the trunk, pharynx, and diaphragm.
Tics and Tourette's Syndrome This can usually be differentiated from akathisia in that it is divided into motor and phonic types. Motor tics are rapid movements of eyes, lips, shoulders, fingers, and other areas. Phonic tics involve coughs, grunts, whistles, and animal noises. These do not occur in akathisia.
Restless Legs Syndrome (RLS) Patients can have some of the same sensations as akathisia, but there is a stronger association with night-time and sleep. RLS affects 3-9% of the population, and more commonly affects older women more. It can be caused by iron deficiency so iron studies should be performed.

There are also rating scales that can aid in identification of akathisia and monitoring response to treatment. One of them, the Barnes Akathisia Rating Scale (see resource list), is a tool specifically for diagnosing drug-induced akathisia. It scores patients on the frequency of movements observed by the clinician and patient's awareness of their restlessness.

Another tool, the Extrapyramidal Symptom Rating Scale (see References and Resources), assesses the frequency and severity of drug-induced movement disorders in conditions including akathisia, Parkinsonism, dystonia, and tardive dyskinesia.

Treatment

Treatment of akathisia is aimed at the cause. If a patient is taking a first-generation antipsychotic drug, consider lowering the dose, switching to a lower-potency first-generation agent, or switching to second-generation drugs as they have less tendency to cause akathisia. For patients taking a second-generation agent, lowering the dose may also help. Note, though, that some second-generation agents (e.g., aripiprazole) have more tendency to cause akathisia than others (e.g., quetiapine).

For patients whose akathisia does not respond to lowering the medication dose or stopping the offending medication (there are reports of persistent akathisia), several drugs can be considered either alone or in combination to reduce symptoms (Table 3). The choice of drug should be guided by the patient's co-morbidities, as there are no good studies that evaluate the relative effectiveness of these drugs. Note that anticholinergic drugs like biperiden, trihexyphenidyl, and benztropine are used to treat akathisia and other movement disorders in younger individuals. They are not generally recommended for use in older adults due to anticholinergic side effects. Cyproheptadine, an antihistamine, has effectiveness similar to beta-blockers for treating akathisia but its anticholinergic effects also make it a suboptimal choice for treating older adults.

Table 3. Medications for Treating Akathisia in Older Adults
Beta Blockers
• Low-dose propranolol and metoprolol can be used, but with caution because of potential bradycardia and hypotension
Serotonin Antagonists
• Mirtazapine - also used for treatment of depression, to boost appetite, and for treatment of insomnia. Side effects include sedation.
Other Agents
• Amantadine, N-Acetylcysteine, Vitamin B-6

Finally, consider a mobility safety assessment if akathisia impairs balance; family education to destigmatize the movement disorder; and mental health counseling if there are stressors that trigger or magnify the movements.

References and Resources

Lohr, JB, Eidt, CA, Alfaraj, AA, Soliman, MA. The clinical challenges of akathisia. CNS Spectrums. 2015:;20:4-14.

Barnes Akathisia Rating Scale. https://doi.org/10.1192%2Fbjp.154.5.672

Chouinard G, et al. Extrapyramidal Rating Scale. The Canadian Journal of Neurological Sciences 1980; 7:233–239

Videos demonstrating akathisia:

- https://www.youtube.com/watch?v=pSXzuCNll6Q
- http://makeagif.com/RkOUpQ

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Supported by: Donald W. Reynolds Foundation, Arizona Geriatric Education Center and Arizona Center on Aging

This project was supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under grant number U1QHP28721, Arizona Geriatrics Workforce Enhancement Program. This information or content and conclusions are those of the author and should not be construed as the official position or policy of, nor should any endorsements be inferred by HRSA, HHS or the U.S. Government.