

# The Use of Antipsychotic Medication In Long Term Care

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**This brief review frames the historical context surrounding antipsychotic medication for patients in nursing homes and other long-term care settings. The information is meant to describe, concisely, the evidence for and against the use of antipsychotic treatment. Every patient's experience is distinctive, and each treatment decision has potential benefits and risks.**

The first antipsychotic medication approved for use in the United States was chlorpromazine. In the 1950s, the use of chlorpromazine allowed for deinstitutionalization of millions of residents from psychiatric hospitals. In the ensuing five decades, antipsychotics in the "first generation" with chlorpromazine and the "second generation," beginning with clozapine, have been in and out of favor for patients in long-term care.

## ANTIPSYCHOTIC MEDICATION AND NURSING HOME REFORM

In 1987, the **Omnibus Budget Reconciliation Act (OBRA)** incorporated nursing home reforms. OBRA required all nursing home residents to participate in a national database originally defined by the Resident Assessment Instrument, today known as the **Minimum Data Set (MDS)**. The Resident Assessment Instrument led to significant improvement in care plan documentation, greater use of advanced directives and better behavioral treatments for problem such as bowel incontinence, while reducing problematic practices such as physical restraints and indwelling urinary catheters.<sup>1</sup>

OBRA led to increased monitoring of antipsychotic medication in nursing homes, but it is not clear whether overall usage declined<sup>2</sup> or remained stable<sup>1</sup> during the early 1990s. For patients receiving antipsychotic medication, the OBRA regulations mandate that all nursing homes report the following: an appropriate diagnosis for use of an antipsychotic medication, including specific target symptoms along with change in these symptoms over time; administration of the medication within a recommended 24-hour dosage limit along with

routine monitoring for side effects; consideration of concurrent behavioral treatment; and, at least one attempt every six months to reduce the dose of antipsychotic (or documentation of a rationale for no dose reduction).<sup>3</sup>

Soon after OBRA, serial introduction of second generation antipsychotics started. Early interest in these medications may have led to increased use in nursing homes.<sup>4</sup> The original interest in the second generation antipsychotics for use in the elderly may have been driven by beliefs regarding reduced risk for parkinsonism, though most of these medications can impair gait and mobility. An estimated 25% of nursing home residents in the United States receive at least one antipsychotic medication in a given year.<sup>5-7</sup> Though much of this use is for off-label indications, the vast majority of antipsychotic treatment is for evidence-based treatment.<sup>7</sup> Nevertheless, the antipsychotic prescribing rate in nursing homes<sup>5</sup> and the relationship between the use of antipsychotics and mortality<sup>8</sup> remain concerns.

## REGIONAL ATTENTION TO THE USE OF ANTIPSYCHOTICS IN LONG TERM CARE

The January 2007 iteration of OBRA recommends **Gradual Dose Reduction (GDR)** of all antipsychotic medications in nursing homes. For patients newly admitted and receiving an antipsychotic medication, or established patients who begin an antipsychotic medication, during the first year of treatment staff must document at least two attempts to reduce the medication, with at least one month between the attempts. If the antipsychotic medication continues beyond the first year, staff must attempt one GDR every year unless clinically contraindicated. Documentation that a GDR is clinically contraindicated must include 1) notation that target symptoms worsened during the most-recent GDR attempt in the current facility along with 2) the physician's current medical opinion as to why additional attempts at GDR are likely to impair the patient's functioning or worsen the target symptoms.

In Massachusetts, the Department of Public Health has convened an Antipsychotic Task Force to raise awareness about antipsychotic use, including possible education campaigns and direct interaction with nursing home clinicians and administrators. Long-term care facilities are likely to welcome such activities because the new GDR guidelines carry devastating penalties for non-compliance. For example, F-Tags are regulations within the state operations manual; they are written by the Centers for Medicare and Medicaid Services. The F-Tags set guidelines for prescribing clinicians, pharmacists, nursing homes and state surveyors. F-Tag 329 applies to unnecessary psychotropic medications. The goals of F-Tag 329 are to ensure that 1) medications are clinically required to treat a condition; 2) behavioral or other non-medication measures are used; 3) medication use is in an effort to promote the highest well-being; 4) actual or potential negative outcomes are avoided; and, 5) all negative outcomes are promptly identified and treated. If GDRs are not conducted according to the rules, the nursing home must undergo a cumbersome follow-up: a level 4 deficiency (immediate jeopardy) results if there is failure to monitor or reduce the dose of an antipsychotic in the presence of a side effect such as worsening gait and mobility due to parkinsonism, or if there is a failure to do a non-contraindicated GDR in the context of a significant negative drug effect such as tardive dyskinesia.

## SAFETY AND EFFICACY OF ANTIPSYCHOTIC MEDICATION USE FOR ELDERLY INDIVIDUALS

The OBRA legislation occurred 15 years before the **US Food and Drug Administration (FDA)** began generalized warnings regarding elderly patients' use of antipsychotic medication. In the years following OBRA, use of first generation antipsychotics declined; by 2004, prescriptions for second generation antipsychotic medications in nursing homes outnumbered first generation use 10 to 1.<sup>6</sup> A considerable portion of this antipsychotic treatment is for behavioral disturbances

associated with dementia; there has been moderate empirical support for this practice since the early 1990s<sup>9</sup> with declining interest regarding these medications in the context of documented adverse events.

As antipsychotic medication prescribing continued, pharmaceutical companies invested in clinical trials directed at gaining an FDA indication for the use of antipsychotics in the treatment of behavioral aspects of dementia. In addition to continued evidence for efficacy, information became available regarding risks for medical adverse events (e.g., stroke, diabetes and death) related to use of second generation antipsychotics in elderly individuals. The first reports of these concerns appeared in 2003: a study of risperidone showed a non-statistically significant increased rate in stroke and mortality for individuals receiving active medication, compared with placebo.<sup>10</sup> By the end of 2003, the FDA requested that all second generation antipsychotics include new warning information. In 2005 the FDA issued a black-box warning for all second generation antipsychotics based on data available from meta-analyses<sup>11</sup> and soon after extended the same warning to all first generation antipsychotics. Today all antipsychotic labeling states: "Elderly patients with dementia-related psychosis treated with antipsychotic drugs are at an increased risk of death."

Occurring concurrently with the warnings regarding use of antipsychotic medications in dementia was the **Clinical Antipsychotic Trials of Intervention Effectiveness – Alzheimer's Disease (CATIE-AD)** investigation of the second generation antipsychotic medications risperidone, olanzapine and quetiapine as treatment for behavioral disturbance associated with dementia due to Alzheimer's disease in community-dwelling outpatients.<sup>12</sup> The CATIE-AD study's first reports have provided consistent evidence of adverse effects<sup>13</sup> including significant metabolic changes in weight and cholesterol metabolism.<sup>14</sup> Additional analyses have shown both positive and negative results regarding clinical efficacy; for example, some clinical symptoms in outpatients with Alzheimer's disease do respond to antipsychotic treatment.<sup>15</sup> This evidence must be weighed against the risk of adverse events such as those described above plus pneumonia.<sup>16</sup>

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### CONSIDERATIONS WHEN STARTING OR CONTINUING ANTIPSYCHOTIC MEDICATION TREATMENT IN THE NURSING HOME

Residents in long term care continue to receive antipsychotic medication because, on a case-by-case basis, symptoms may improve, along with few adverse events. Residents may receive antipsychotic medication for behavioral symptoms associated with dementia or for an illness other than dementia. When considering use of an antipsychotic medication in the long term care setting, the first step is to clarify the condition in need of treatment. Antipsychotics are approved for use in schizophrenia, and several of the second generation antipsychotics have additional FDA-approved indications for the treatment of mood episodes such as acute mania or depression. Though considered "off-

label" use, antipsychotic medication is reasonable for psychotic symptoms that occur in isolation (such as in delusional disorder) or in the context of other conditions such as delirium, Parkinson's disease, psychotic depression and dementia. Regarding dementia, in addition to the treatment of psychotic symptoms such as hallucinations and delusions, antipsychotic medication has been used as treatment of other target symptoms such as irritability, aggression and disinhibition, as noted above.

Once a target symptom(s) has been established, the clinician should ask several questions before starting a new trial with an antipsychotic. First, is there a current behavioral emergency, or a high likelihood that intense target symptoms will recur soon and interfere with the patient's or others' safety? Secondly, is there a reason to suspect an urgent medical cause? If yes, then work-up and treatment might best occur in an acute-care hospital rather than the nursing home. If the target symptoms do not require hospital-level care, then several tasks can be considered concurrently. What is the likely underlying disorder or condition contributing to the target symptoms? Are tests needed to confirm the diagnosis? Does any currently-prescribed medication carry risks or side-effects that might relate to the target symptoms? If so, could this medication be reduced or stopped? Has any change in environment or daily routine occurred recently; if yes,

#### Before the Start of an Antipsychotic Medication, Consider:

- What is the indication, condition or target symptom(s)?
- Is any testing necessary to confirm a diagnosis?
- Might any already-prescribed medications be causally related to a target symptom?
- What safety goals must be considered; is there current dangerous behavior?
- Can a psychosocial or behavior treatment be started immediately?
- Who is providing informed consent for any new medication?
- Have medications other than antipsychotics received adequate trials?
- What baseline and follow-up monitoring will be recommended with an antipsychotic?
- Does a medical colleague support the use of antipsychotic treatment in this case?
- How will use of the antipsychotic medication be documented?<sup>20</sup>
- What endpoints for antipsychotic treatment will be considered within the first six months?

could the surroundings be restructured? How are family members involved in the patient's care? Can a surrogate decision-maker or primary caregiver assist with problem-solving regarding the symptoms?

After a diagnosis has been established, target symptoms fully characterized and environmental factors addressed, the clinician should ask several additional questions. Might any formal behavioral or psychosocial treatments be feasible for these target symptoms? Could medication include a trial of a drug that is not an antipsychotic? (Long term care facilities frequently contract with specialty service providers who are familiar with medication treatment options; these providers can, over time, become acquainted with the individual nursing home environment to determine which psychosocial or other treatments have the best likelihood of success.) As quality indicators regarding the treatment of dementia and other mental health conditions in nursing homes come under increased scrutiny, every resident with a mental health diagnosis may at some point be expected to receive mental health services.<sup>17</sup>

For now, each patient's case must be treated uniquely. The FDA has approved antipsychotics for illnesses such as schizophrenia, but the use of these medications in the nursing home, irrespective of diagnosis, must follow standard OBRA and GDR guidelines. For the treatment of behavioral symptoms related to Alzheimer's disease or another dementia, no pharmacotherapy is approved for these symptoms, though FDA-indicated treatments for memory loss in Alzheimer's disease such as donepezil and memantine may provide some behavioral benefit. Also, psychosocial treatments for dementia have demonstrated benefits amidst few risks<sup>18</sup> as reviewed by Curtin in this issue. Expert opinions regarding the management of agitation in dementia<sup>19</sup> and the use of antipsychotic medication in the elderly<sup>20</sup> are useful reference points for clinicians. Ultimately, if the clinician initiates medication for behavioral symptoms in a long-term care setting, particularly if the medication is an antipsychotic, it must be clear that the situation is likely to improve with the medication and that the treatment occurs under careful monitoring with a plan for discontinuation after short-term use.<sup>21</sup>

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## Disclosure of Financial Interests

The authors and/or spouses/significant others have no financial interest to disclose.

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