



Pharmacy Newscapsule

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Gradual Dose Reduction or Tapering Scenarios by Doug Englebert, R. Ph.

The following is a scenario that provides some general guidance for medication dose reduction or tapering, based on the Centers for Medicare and Medicaid Services (CMS) guidance. The scenarios listed below are only examples of what may occur and are intended to provide guidance for the investigation of, and compliance with, F329 - Unnecessary Drugs. Real situations involving individual residents identified during survey may have different characteristics and complexities that can affect compliance with F329.

The male resident has been taking citalopram for eight months. He has Alzheimer's and the citalopram was started for behavior symptoms that were thought to be a result of depression. The resident had no previous history of depression. What are the requirements for dose reduction?

The requirements for dose reduction in this resident include two attempts in the first year, performed in two separate quarters, with at least a month between attempts. However, the first dosage reduction can be avoided by providing a clinical rationale, along with support from clinical standards of practice justifying why the dosage reduction would not be in the resident's best interest.

Since this resident has no previous history of depression or confirmed depression, there is no clinical standard of practice to support continued use of citalopram. Therefore, the first attempted dose reduction will need to occur in month eight or nine in order to meet the quarterly requirement.

The second dosage reduction must be attempted in the last quarter of the year. The second attempted dose reduction can be avoided if there is clinical contraindication. Failure of the first dosage reduction, along with a clinical rationale provided by the physician, constitutes evidence of clinical contraindication.

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There is an APP for That!

Drugs.com Medication Guide

This is an app that gives a complete A-Z listing of medications, a pill identifier, an interactions checker, and even allows for a personal medication record.

For the personal medication record, you can add your medications and instantly assemble relevant medication information in an easy-to-read personal format.

A nice feature is a question and answer section that allows you to look up many frequently asked questions about a medication.

Check it out!

Warfarin Monitoring by Doug Englebert, R. Ph.

How often does a Prothrombin Time (PT) or International Normalization Ratio (INR) measure need to be done? PT is a blood test that measures how long it takes blood to clot. INR is a method of standardizing prothrombin time results to compare prothrombin time results among labs using different test methods.

Warfarin (Coumadin®) activity needs to be monitored by frequent blood testing. PT or INR are the lab tests that are typically performed to determine blood clotting and determine the dose of warfarin that is needed. The INR result is most commonly reported and is considered at a stable rate if between 2 and 3.5. The stable rate of the INR is necessary for safe warfarin use. Past standards of practice of stable INR monitoring involved lab testing performed every four weeks or once a month. However, updated standards of practice in certain situations suggest four-to-six week testing and even longer in some stable patients.

Health care facility staff who are responsible for monitoring warfarin may want to have specific procedures to assure that an INR is ordered and conducted. It also may be beneficial to have specific days of the month scheduled for INRs for individuals taking warfarin.

Additional INRs should be conducted when an individual taking warfarin does not have a stable ratio. Some of those instances include when warfarin is first being started, when an individual is put on a medication that interacts with warfarin, or when diet or physical condition changes.

Initiation of Warfarin

Dosing of warfarin is something that must be individualized. Typically for the elderly, a loading dose is NOT recommended and low initiation doses like 2-5 mgs is usually recommended. A baseline INR is typically obtained. Oftentimes, individuals who need rapid coagulation coverage are started on heparin or low molecular weight heparin at the same time the warfarin dosage is initiated. With or without heparin or low molecular heparin, the initial INR should be conducted in two-to-three days. After the initial INR, follow up INRs may be conducted daily in some settings, like hospitals, or every two-to-three days in other settings. Once the INR is stable for two consecutive readings that are at least 24 hours apart, the heparin or low molecular heparin will be discontinued.

After the two stable INR readings are obtained, guidelines support three INRs in week one, two times in week two, then weekly for four weeks, and then monthly. Some guidelines indicate the timing of INRs is dependent on each subsequent INR, patient condition, and warfarin dosage adjustment. The standard of practice for warfarin does not support simply obtaining one INR after warfarin initiation that is in the stable therapeutic range and then going directly to the monthly INR.

Drug Interactions

There are many medications that interact with warfarin. Some medications increase the effect of warfarin and other medications decrease the effect. In most cases, if a medication is added that interacts with warfarin, an INR should be checked in two-to-three days just like when there is a dose change or warfarin is started. Subsequent INR readings will be dependent on those initial readings and the length of time the medication interacting with warfarin will be used.

Typically, INR readings should be done every two-to-three days while on the offending medication until there is evidence that the medication interaction is stable.

Resident Condition

Nutritional changes can play a significant role in an individual's warfarin responses. This can include changes in eating habits or diets, addition of dietary supplements, situations where nausea and vomiting occur, eating decreases, or when IV therapy occurs. It is very important that, when these situations occur, notification is provided to the physician, pharmacist, and/or those who are monitoring the warfarin via INR. The INR should be checked in two-to-three days in these instances just like during a medication interaction or after warfarin initiation. Subsequent INR readings will be dependent on the resident condition and INR readings.

New Anticoagulant Medications

In recent years, three new anticoagulants have been approved for various indications to prevent stroke, systemic embolism, and venous thromboembolic events. These medications include dabigatran (Pradaxa®), rivaroxaban (Xarelto®), and apixaban (Eliquis®). These medications do not require INR monitoring. Unlike warfarin, these medications currently do not have an antidote to reverse the effects (Vitamin K is the antidote for warfarin). Dabigatran can be reversed by hemodialysis. Since these medications are newer, there may be less clinical evidence for some uses; experience in the elderly with significant comorbidities is not well established. Although there is no requirement for INR monitoring, facilities using these products must rely upon careful observations of signs and symptoms of unwanted bleeding.

Consultant Corner

- 1. I observed medications in a Community Based Residential Facility (CBRF) labeled by placing on a plastic bag. The labeling was done by the pharmacy indicating the directions for use of the medication. The medication was subsequently inside the bag but the medication itself did not have the label on the medication container, only the bag itself. Is this appropriate?**

The DHS 83 rules do not specifically address this issue. Labeling is a communication and safety mechanism. Some containers, like tubes of ointment and little eye drop bottles, may not be conducive to placing a label on the container as doing so may cover up valuable information leading to errors or may even alter the container in a manner by which the medication cannot be given safely. Therefore, placing a label on a bag or larger container to which the medication itself is contained can be a logical, safe way to package and label the medication.

Like other medication packaging methods, there are always weaknesses. For example, a medication in an eye drop bottle that is not labeled (label is on box, secondary bottle, or bag) could be separated from the external container which includes the patient's name. This may lead to the medication being misplaced with another patient's medications and, eventually, used for the wrong person. So, the weakness is separation of the labeling from the actual product. Facilities that utilize this system should be aware of this weakness and have

systems in place to account for this. For example, a small label may be able to be placed on the actual medication container, linking it back to the more comprehensive labeled container.

- 2. I observed Levothyroxine administered and the patient immediately ate breakfast. The manufacturers recommend the medication to be given 1/2 to one hour before meals. The medication reference I have says the same thing. Is this something that should be counted as a medication error and potentially cited?**

It is recommended that Levothyroxine be given in the morning, 30-60 minutes prior to a meal, for two reasons. First, it establishes a consistent administration time to help for compliance or remembering to take the medication every day. Usually, that is not an issue for individuals in a facility because someone else is there to remind them or administer the medication. The second reason is that Levothyroxine, when given with food, is not absorbed as well and, therefore, an individual may not get the desired response. However, if Levothyroxine is consistently given with food every day, the dose will be adjusted accordingly to generate the desired response. So, the bottom line is consistency. If the medication is not given in a consistent manner, that is something that can be addressed as a medication error and potential citation.