

Oral Chemotherapy Medications: The Need for a Nurse's Touch

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Since 2005, many oral chemotherapy agents have been released. Nurses often are not directly involved with patients who receive oral agents. Difficulties with adherence, safety, patient teaching, and access to oral agents can hinder treatment. Nurses can increase adherence and keep patients safe by developing standardized written prescriptions, encouraging the use of patient diaries, offering dosage calendars, and supplying contact information for an office pharmacist.

Oral chemotherapy agents may be handled differently than IV chemotherapy. In a busy clinic, physicians and nurse practitioners write for, prescribe, and teach patients about oral agents. Many times nurses are not involved in any aspect of the process of prescribing oral chemotherapy. Oral agents still are considered chemotherapy and can be as dangerous as IV forms. To ensure patient adherence, safety, and education, nurses should be involved in the process when oral agents are initiated. Issues related to oral agents include adherence, safety, patient teaching, side-effect management, and drug access. See Table 1 for a list of the latest oral medications, dates of U.S. Food and Drug Administration release, and indications for use.

Advantages of Oral Agents

The primary advantage of oral chemotherapy is one of convenience (Aisner, 2007). Patients can take their medications at home instead of needing an appointment in an office for administration of IV chemotherapy. Visits to a physician's office often are less frequent than with IV chemotherapy, which saves time and reduces costs such as office copay-

ments and administrative fees. Quality of life may be better for patients taking oral medications at home because of flexibility, convenience, and a sense of control.

Adherence With Oral Agents

Adherence with oral chemotherapy can be an issue if not addressed by the oncology team. Adherence is "the extent to which a patient's behavior coincides with medical advice" (Partridge, Avorn, Wang, & Winer, 2002, p. 652). A number of studies have addressed adherence with tamoxifen; long-term use drops to less than 80% (Chlebowski & Geller, 2006; Grunfeld, Hunter, Sikka, & Mittal, 2005; Kahn, Schneider, Malin, Adams, & Epstein, 2007; Lash, Fox, Westrup, Fink, & Sillman, 2006; Partridge, 2006; Partridge, Wang, Winer, & Avorn, 2003; Waterhouse, Calzone, Mele, & Brenner, 1993). Various factors, including the experience of side effects and number

of other medications, were associated with nonadherence. Few studies have evaluated adherence to oral chemotherapy. Other long-term medications that decrease mortality, such as those for high blood pressure or myocardial infarction, also have low adherence rates, ranging from 40%-50% (Partridge et al., 2002).

Adherence issues include dosing schedules, complexity of dosing regimens, administration of other potentially interacting medications, timing of a dose in relation to food intake, a feeling of not wanting to appear "bad" to the physician for not taking medication, cost, and side-effect management (Moore, 2006). Complexity of dosing regimens causes patient confusion and may be related to the number of pills needed or a combination of different oral chemotherapy agents (e.g., capecitabine and lapatinib). In a study conducted by Taylor, Winter, Geyer, and Hawkins (2006), the error rate for oral chemotherapy administration at home was found to be approximately

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