Editorials

Challenges of Improving Adherence to HIV Therapy

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The availability of effective antiretroviral medications has greatly improved the clinical management of human immunodeficiency virus (HIV) infection. Current clinical guidelines provide evidence-based approaches that, when used properly, can assist in maximizing efforts to suppress HIV infection.[1] Unfortunately, suppression of the HIV RNA viral load cannot be fully realized if patients do not adhere to the prescribed regimens.

Inadequate adherence to medication regimens among patients with a chronic disease is a major problem, and is not unique to those with HIV infection.[2] However, adherence is of particular concern in patients with HIV infection who must consume 95 percent of their medications to avoid problems with viral resistance and therapeutic failure.[1] Physicians who care for patients with HIV infection have a daunting task. In addition to designing, implementing, and monitoring antiretroviral regimens for effectiveness and potential complications, they must also be familiar with myriad factors that may contribute to nonadherence. Failure to address these factors may negate therapeutic intentions of the prescriber, resulting in inadequate viral suppression. Factors that contribute to patient nonadherence to antiretroviral regimens include the following: pill burden, socioeconomic issues, cultural differences, adverse effects of medications, poor health literacy, depression, substance abuse, potential drug-drug interactions, and poor patient-physician relationships.[1,3]

It is clear that many physicians may not have sufficient time to address these issues during a single visit. Nurses, pharmacists, case managers, mental health professionals, and support groups can work collectively as a team to assist in identifying and rectifying obstacles to patient care. Although involving other members of the health care team may help address issues of poor adherence, there are no randomized controlled trials that compare an interdisciplinary approach to usual practice.

In a review of antiretroviral adherence studies covering a seven-year period, authors concluded that patients will be more likely to (1) enroll in adherence-improving interventions that protect their confidentiality, (2) attend when scheduling is responsive to their needs, (3) continue with an intervention when they develop a strong, one-on-one relationship with the intervener, and (4) respond better to stand-alone interventions than to interventions integrated into existing delivery systems.[4] In addition, patients who had limited experience with antiretroviral therapy were found to be more likely to continue with adherence-improving interventions.

Another study revealed that failure to keep appointments with a physician was associated with failure to receive antiretroviral medications or to achieve an undetectable HIV viral load (less than 50 RNA copies per mL).[5] However, the study did not address why appointments were missed. Missed appointments may serve as a trigger to address potential adherence issues.

Methods for assessing adherence to antiretroviral therapy, as well as study designs and definitions of adherence, vary greatly in the literature.[5] Currently, there is not a standard method by which to measure patient adherence. Examples of methods used in various studies include pill counts, pharmacy refill data, and use of electronic medication event monitoring systems (MEMS) caps, in which a computer chip is embedded in a specially designed pill-bottle cap. In many cases, reasons for poor adherence were not analyzed, and processes designed to alleviate these barriers are seldom discussed.[6]

In summary, the pharmacotherapeutic ▶

management of HIV infection has made considerable strides over the past decade. The number of effective agents and the use of these agents are well delineated. The challenge, however, lies in our ability to assist patients with confronting and managing the many factors that may prevent effective use of these agents. Further research is required to identify the best methods to assess nonadherence to therapy, and to determine which intervention models should be used to improve adherence. Meanwhile, physicians should establish open lines of communication with patients to stress the value of therapy adherence, and to assist them in achieving therapeutic goals.

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