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Symposium report

Cancer-related Anemia and Fatigue: 10th International Congress on Anticancer Treatment

Although fatigue is the most debilitating side effect of cancer and its treatment, it is still often overlooked, under-recognized and undertreated. A satellite symposium was held on this subject on 1 February 2000 during the 10th International Congress on Anticancer Treatment in Paris, France. The abstracts of presentations by David Khayat (Paris, France), Peter Harper (London, UK) and Jeffrey Crawford (Durham, USA) are given below. [© 2000 Lippincott Williams & Wilkins.]

What we don't know about our patients—does physician perception of cancer-related fatigue match patient experience?

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Fatigue is a highly prevalent condition among cancer patients. It has often been described as the longest lasting side effect of cancer. Most cancer patients report that fatigue is a major obstacle to maintaining normal activities such as work, socializing and household chores.[1,2]

Anemia is now recognized as a major part of the etiology of fatigue in cancer patients.[3] There are several causes of anemia in cancer. Blood loss or infiltration of the marrow are both causes of fatigue directly attributable to the disease process. However, there is also the anemia of chronic disease that accompanies chronic infections, chronic inflammation or cancer. Some anemia in cancer is iatrogenic—it is a frequent side effect of chemotherapy or radiotherapy.

A survey of US cancer patients found that 53% experience fatigue on most days.[1] The majority of patients also reported that fatigue affected their ability to work and enjoy life. More strikingly, it was shown that oncologists' perception of the extent of the effect of fatigue was radically different from that of their patients. While 61% of patients reported that fatigue affected their daily lives, only 37% of oncologists thought that this was true.[1] Treatment-related side effects as well as disease-related symptoms can affect patient quality of life. Several instruments have been developed to assess this impact more accurately. These include the Functional Assessment of Cancer Therapy (FACT) as well as the Linear Analog Scale Assessment (LASA)—which has been validated as the Cancer Linear Analog Scale (CLAS).

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Cancer-related anemia—do we have a problem?

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Anemia is a common complication in cancer patients, particularly those receiving aggressive chemotherapy or with advanced disease. Several retrospective studies have been carried out to determine the incidence of anemia in cancer patients.

Recent anemia audits in the UK and France have indicated that over 60% of patients undergoing chemotherapy have hemoglobin levels below 12 g/dl.[1,2] This rate varied, based on the tumor type, possibly due to differences in disease process or therapy. For example, patients with hematologic malignancies treated with chemotherapy are particularly prone to anemia.[3] The symptoms found in cancer patients with anemia are typical of anemic patients in general, and can affect many organ systems including the cardiovascular system, central nervous system, gastrointestinal system, genital tract, vascular system and immune system.[4] This broad range of symptoms can affect both the patient's physical and emotional well-being.[5] The most prevalent cancer-related side effect is fatigue, with 76% of chemotherapy patients experiencing it at least once a week.[6] However, physicians do not often recognize the rate of occurrence or impact that fatigue has in cancer patients and this lack of recognition can lead to undertreatment.[7]

The high rate of occurrence as well as the debilitating effects of anemia can lead to severe side effects. The accurate diagnosis and proper treatment of anemia is critical in terms not only of treatment outcome but also patient quality of life.

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Management of anemia—does epoetin α offer the answer to effective treatment?

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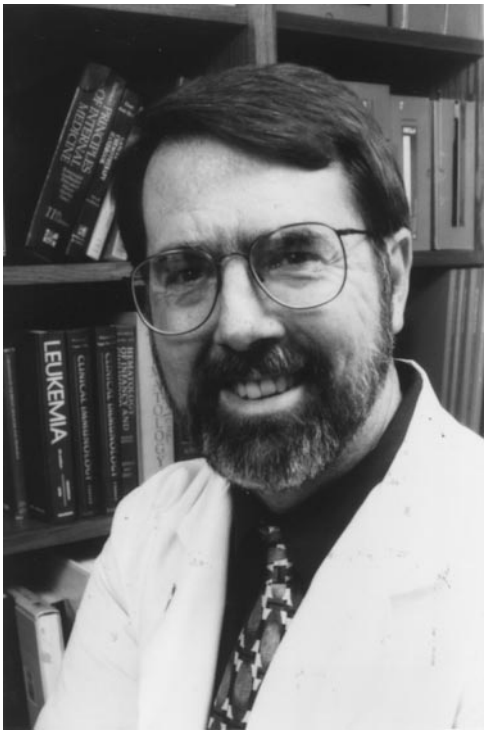

Since anemia has been shown to have a negative effect on quality of life and to be associated with poor treatment outcome, there is a need to manage this disorder more effectively.[1,2] The primary treatment options are blood transfusions or recombinant human

erythropoietin (epoetin α). There is extensive experience with transfusions and they provide an immediate response. However, patients are seldom transfused to an optimal hemoglobin level. In addition, the duration of this effect is relatively short-lived and there are many associated risks, including viral infection.

The benefits of epoetin α treatment in anemic cancer patients are well documented. In addition to double-blind, placebo-controlled, multicenter studies,[3] two large-scale open-label studies, each involving over 2000 cancer patients with non-myeloid malignancies,[4,5] have investigated the effect epoetin α has on hemoglobin levels, quality of life and tumor response. In both studies doses of approximately 150 IU/kg were administered 3 times a week. These studies found that treatment with epoetin α was associated with significant improvements in self-reported quality-of-life scores, including energy level, activity level and overall quality of life. These improvements were correlated with increases in hemoglobin levels.[4,5] Analysis of tumor response in these patients indicated that the observed improvements in quality of life and hemoglobin levels were independent of tumor response.[5] These reports have been supported by a recent double-blind, placebo-controlled study.[6]

In another, large, prospective, community-based trial, a once-a-week dosing scheme was equivalent to the 3 times-a-week schedule in the earlier trials in terms of improving hemoglobin levels and quality-of-life measures.[7] In all of these trials, the optimal hemoglobin level appears to be 12 g/dl. Recently, it has been shown that these improvements in quality of life can occur even in cases of mild anemia.[8] It is hoped that accurate monitoring of hemoglobin levels before and during the treatment of cancer patients can help to identify patients who would benefit substantially from either anemia treatment or prevention.

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