experienced by women receiving chemotherapy for breast cancer

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An in depth descriptive study of women receiving chemotherapy for breast cancer showed discrepancies between the side effects that they had expected would be the most difficult to cope with and those that they had actually found to be the most difficult.[1]

Patients, methods, and results

The patients comprised 60 consecutive women with breast cancer aged from 24 to 66 years (mean 43·3). Chemotherapy combinations were based on doxorubicin for locally advanced cancer and cyclophosphamide for adjuvant treatment of local disease.

Before treatment data were collected on the women's knowledge and expectations of chemotherapy. During treatment their experiences of side effects were reported. These data were collected mainly by interview. Reflections on chemotherapy, including views on information and support provided, were reported at follow up three weeks after treatment by postal questionnaire, which was returned by 51 women.

The women's knowledge about their forthcoming treatment was limited. Eleven had no knowledge of the drugs used and some of them did not even appreciate that chemotherapy took different forms. All women reported being warned about possible side effects, most commonly those of hair loss and sickness (table). These two problems were the ones most often expected to be the most difficult. Though hair loss was expected to be the worst side effect by 35 women, fewer (13) eventually reported it as such despite the fact that 37 women eventually had alopecia. Similarly, sickness was reported as the most difficult side effect by fewer women than had expected this (four *v* 11).

In general the side effects actually experienced by the women were rather different and more diverse than they had expected. More side effects were experienced than they had been warned to expect; the women experienced a mean of 5·4 side effects after the first treatment and 6·7 after the last compared with the 3·7 they had been warned about. A total of 36 different side effects were reported. Those most often reported were tiredness, nausea, loss of appetite, mouth soreness, pain, sickness, and sore eyes. Unforewarned side effects included weight change, hot flushes or night sweats, heartburn, paraesthesia, and taste change.

Side effect	No of women
Hair loss	60
Sickness	45
Tiredness	30
Nausea	21
Mouth soreness/ulcers	16
Infections/lowered resistance to infection	15
Flu-like symptoms	14
General unwellness	6
Diarrhoea and/or constipation	5
Loss of appetite	3
Depression	2
Skin or nail problems	2
Sore/itchy eyes	2
Total	221
Mean	3·7

That tiredness would be the single most often reported side effect was completely unexpected. It was reported by no less than 87·5% of the sample at any stage of treatment. Having to "give in" to tiredness and to offload domestic and work responsibilities was a source of considerable anxiety for some women. Only two women had expected tiredness to be potentially so problematic and only 30 had been forewarned of this (table). Tiredness was reported by 11 women as the most difficult side effect.

After reflecting on their treatment most women (35 of the 51 who replied to the follow up questionnaire) reported that they had felt adequately prepared for chemotherapy. Others complained that they had not been warned that there could be so many different side effects and that they had been given little practical advice on coping with them.

Comment

The dilemma of how to prepare patients for chemotherapy without inducing unnecessary fear and anxiety is well recognised. These findings suggest, however, that preparation needs to consider that the side effects of chemotherapy may be more diverse, and the reactions of patients more individualistic, than tends to be acknowledged. Problems such as tiredness, even if not hazardous, will continue to be underrated if they are not asked about, and we recommend a more open minded approach to the routine monitoring of patients' problems during chemotherapy.

1 Tierney AJ, Taylor J, Closs SJ. *A study to inform nursing support of patients coping with chemotherapy for breast cancer.* Edinburgh: Nursing Research Unit, University of Edinburgh, 1989.

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Effects of withdrawing erythropoietin

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Recombinant human erythropoietin is an effective treatment for the anaemia of chronic renal failure.[1] Exercise tolerance and quality of life are dramatically improved.[2] Most side effects are not life threatening, so only a small proportion of patients are completely unsuitable for treatment.[3] Until recently patients in the United Kingdom have received erythropoietin freely as part of clinical trials. Now that the drug has been granted a product licence, many units are being faced with the prospect of reducing the numbers of patients receiving erythropoietin owing to financial constraints. We report our findings from 12 patients treated with and withdrawn from erythropoietin.

Patients, methods, and results

Twelve patients who were undergoing haemodialysis (mean age 49 years, range 21-72 years) with haemoglobin concentrations of less than 85 g/l were treated with erythropoietin (Recormon, Boehringer Mannheim UK Pharmaceuticals), starting at a dose of 120 IU/kg/week. Five patients received the erythropoietin intravenously and seven subcutaneously. After the first six weeks the dosage was increased at a minimum of fortnightly intervals to achieve a target