A Randomized Clinical Trial of a Videotape Intervention for Women With Chemotherapy-Induced Alopecia: A Gynecologic Oncology Group Study

Susan Nolte, RN, PhD, CRNP, James Donnelly, PhD, Sharon Kelly, RN, Patricia Conley, RN, and Roberta Cobb, RN, OCN®

Purpose/Objectives: To evaluate changes in body image and self-esteem in women with gynecologic malignancies who experience chemotherapy-induced alopecia and to examine the effectiveness of a videotape intervention on body image and self-esteem.

Design: A prospective, randomized study.

Setting: Subjects were accrued from 11 Gynecologic Oncology Group (GOG) member institutions participating in 14 GOG treatment protocols.

Sample: 136 women with chemotherapy-induced alopecia, a mean age of 57.7 years, and advanced disease at study entry.

Methods: Prior to the first course of chemotherapy, all subjects received standard counseling regarding hair loss. Body image and self-esteem scores were obtained prior to course 1 and 3 and after course 4 of chemotherapy. Prior to course 3, women with grade 2 alopecia were allocated randomly to the videotape intervention or no intervention.

Main Research Variables: Total body image and self-esteem as measured by the Body Cathexis/Self-Cathexis Scale (BCSCS).

Findings: A small but statistically significant change (p = 0.045) in body image was observed after chemotherapy-induced alopecia, with no change in self-esteem. The videotape did not produce a significant effect on body image score.

Conclusions: The study results support prior studies that have reported changes in body image as a result of chemotherapy-induced alopecia. The intervention employed (a videotape) was not effective. The BCSCS is a simple and quick measurement for use in future studies.

Implications for Nursing: Chemotherapy-induced alopecia has an adverse effect on body image. Novel interventions are needed to assist women in coping with this consequence of treatment.

Key Points...

- Alopecia, a common side effect of many chemotherapeutic agents used to treat gynecologic malignancies, may affect patients’ body image and self-esteem and influence their treatment decisions.
- Reliable methods exist to measure body image and self-esteem.
- A videotape intervention was not more successful than standard interventions (counseling and prostheses) in improving or preventing changes in body image.

Alopecia is a common and devastating, although temporary, side effect of many antineoplastic agents. The impact of the potential loss is so profound that some patients with cancer consider refusing therapy; indeed, some individuals actually refuse therapy because of the possibility (Fawzy, Secher, Evans, & Giuliano, 1995; Kennedy et al., 1983). Hair reflects personal expression and is associated with beauty, age, and sexuality. Particularly for women, hair loss is a significant concern that is compounded by other physical and emotional events related to cancer therapy. Many women with breast cancer report that dealing with hair loss is more difficult than coping with the loss of a breast because hair loss is visible to others and is a constant reminder of their diagnosis (Pozo-Kaderman, Kaderman, & Toonkel, 1999). In a qualitative study of 15 participants, being constantly reminded of their disease as a result of alopecia emerged as a major aspect of the experience (Williams, Wood, & Cunningham-Warburton, 1999).

Women with cancer have cited alopecia as the most disturbing aspect of the chemotherapy experience (Munstedt,