Satisfaction Versus Dissatisfaction With Venous Access Devices in Outpatient Oncology: A Pilot Study

Cynthia Chernecky, PhD, RN, AOCN®

Purpose/Objectives: To examine outpatient oncology satisfaction/dissatisfaction with venous access devices (VADs), identify positive and negative experiences, and determine their overall effect on quality of life.

Design: Descriptive.

Setting: Outpatient oncology clinic in the United States.

Sample: Convenience sample of 24 patients who had a VAD and were receiving outpatient chemotherapy treatments.

Methods: Consecutive patients meeting study criteria were invited to complete a two-page questionnaire during their clinic visit.

Main Research Variables: VAD, satisfaction, dissatisfaction, quality of life.

Findings: Patients were extremely happy with VADs. The top three benefits were (a) decreased pain compared to venipuncture, (b) the need for fewer needlesticks, and (c) quicker blood draws for laboratory analysis. Negative experiences were infrequent, but 29% of subjects cited monthly heparinization, sleep disturbances, and site soreness following chemotherapy treatments. Overall, 92% stated that the VAD had improved their quality of life.

Conclusions: Chemotherapy outpatients were extremely happy with their VAD, found many benefits, and stated that it improved their quality of life.

Implications for Nursing Practice: Nurses need to support the use of VADs early with patients receiving multiple chemotherapy treatments on an outpatient basis. Research and education need to continue regarding heparinization and discuss interventions to reduce site soreness and sleep disturbances.

Key Points . . .

➤ More than 50% of outpatients receiving chemotherapy have had previous problems with IV needle starts and the drawing of peripheral blood work prior to having their venous access devices (VADs) inserted.
➤ Chemotherapy outpatients have experienced overwhelming satisfaction regarding their VADs.
➤ Nurses should encourage the use of VADs earlier in the patient’s treatment process.

Venous access devices (VADs) were developed primarily to overcome the problem of the need for frequent venous access associated with long-term chemotherapy and blood draws. The use of specific VADs by an institution often is associated with physician preference (D’Angelo et al., 1997) or cost (Freytes, 1998) through purchasing departments, even though research findings support that nurses are the most appropriate healthcare providers to determine the correct venous access product (Intravenous Nurses Society, 1997; Winslow, Trammell, & Camp-Sorrell, 1995).

The question regarding quality of life of patients with VADs often is not a factor considered or known (Costantini, Napolitano, Scurti, & Innocenti, 1997). The literature is replete with problems associated with the use of VADs, including infection (Astagneau et al., 1999; Carreira-Villamor et al., 1997; Goldschmidt et al., 1998; Kock, Pietsch, Krause, Wilke, & Eigler, 1998; Muscedere, Bennett, Lee, Mackie, & Vanderburgh, 1998; Orr & Ryder, 1993; Pector, 1998; Sotir et al., 1999), venous thrombosis (Kock et al.; Orr & Ryder; Pector; Young & Gould, 1997), failure to withdraw blood (Mayo, 1998; Orr & Ryder; Richardson & Bruso, 1993; Whigham et al., 1999), venous thrombosis (Kock et al.; Orr & Ryder; Pector; Young & Gould, 1997), failure to withdraw blood (Mayo, 1998; Orr & Ryder; Richardson & Bruso, 1993; Whigham et al., 1999), catheter dislodgement and damage (Kock et al.; Mayo & Pearson, 1995; Viale, Yamamoto, & Geyton, 1999), and extravasation (Dearborn, De Muth, Requarth, & Ward, 1997; Freytes, Reid, & Smith, 1990). Many of the advantages and disadvantages of VADs are known through clinical experiences and research studies (Dearborn et al.; Lyon, Griggs, Johnson, & Olsen, 1999); however, many of the studies are generic (Pector; Richardson & Bruso), not product-specific.

Cynthia Chernecky, PhD, RN, AOCN®, is an associate professor of nursing in the Department of Adult Health in the School of Nursing at the Medical College of Georgia in Augusta. (Submitted June 2000. Accepted for publication December 8, 2000.) (Mention of specific products and opinions related to those products do not indicate or imply endorsement by the Oncology Nursing Forum or the Oncology Nursing Society.)