Ovarian cancer treatment: The benefit of patient telephone follow-up post-chemotherapy

By Dale F. Kelly, Wylam J. Faught and Laurie Ann Holmes

Abstract
Approximately 2,500 women in Canada were diagnosed with cancer of the ovary in 1997 (NCIC, 1997). Standard therapy consists of surgical tumour debulking and cytotoxic chemotherapy. Very little data are available examining the most appropriate outpatient management of patients receiving chemotherapy. The objective of this study was to assess the impact of and benefit from telephone follow-up between chemotherapy treatments for patients with cancer of the ovary.

Patients with cancer of the ovary were treated every three to four weeks with a cisplatin-based chemotherapy. Telephone follow-up was performed five to seven days post-treatment by the gynaecology oncology liaison nurse. Follow-up addressed issues pertinent to treatment and disease side effects. A patient survey addressing the impact of telephone follow-up was performed on a sample of the patient population. Thirty-one patients responded to the survey. Eighty-seven per cent found that receiving a call post-chemotherapy was reassuring and helpful. Eighty-three per cent stated that medications could be adjusted according to the severity of side effects. Eighty per cent of patients agreed that most issues had been dealt with at the time of telephone follow-up. Sixty-four per cent felt that their concerns had been addressed during the phone calls, and only 22% had suggestions on how to improve follow-up.

Telephone follow-up during chemotherapy was a valuable tool in assessing patient needs, side effects, and concerns experienced during treatments. Telephone follow-up may facilitate early identification of patient problems allowing appropriate and timely intervention.

Introduction
Approximately 2,500 women in Canada were diagnosed with ovarian cancer in 1997 (NCIC, 1997). Unfortunately, 75% of women present to their physicians with advanced stage disease. Traditional therapy often consists of surgical tumour debulking and cytotoxic chemotherapy. Cisplatin and paclitaxel are employed as standard first-line chemotherapeutic agents at our centre and are usually accompanied by side effects which include nausea, vomiting, alopecia and neurotoxicity.

Three years ago at our centre, ovarian cancer chemotherapy was moved from an inpatient to an outpatient setting, primarily as a cost containment initiative. A symptom management team that includes physicians, nurses, a pharmacist, a social worker, and dietitian collaborates to optimize the control of the adverse effects of chemotherapy. A fundamental principle of outpatient therapy is patient teaching to facilitate the patient assuming responsibility for symptom management.

Very little data are available that identify the optimal outpatient management of patients between chemotherapy treatments. Existing research on the use of the telephone in ambulatory care settings is limited and focuses on settings such as paediatric clinics and family practice offices (Nail, Greene, Jones & Flannery, 1989). Telephone interventions have been used in a variety of health care settings.

ABRÉGÉ

TRAITEMENT DU CANCER DE L’OVAIRE: LES AVANTAGES DU SUIVI TÉLÉPHONIQUE DES PATIENTES APRÈS LES TRAITEMENTS DE CHIMIOthéRAPIE


Les patientes atteintes d’un cancer de l’ovaire subissaient à toutes les trois ou quatre semaines un traitement de chimiothérapie à base de cisplatine. Le suivi téléphonique était effectué entre 5 et 7 jours après le traitement par une infirmière de liaison en gynécologie-oncologie. Ce suivi portait sur les questions relatives aux effets secondaires du traitement et de la maladie. On a effectué une enquête sur l’impact et les bénéfices du suivi téléphonique du point de vue des patientes auprès d’un échantillon de cette population. Trente et une patientes ont ainsi participé à l’enquête. Quatre-vingt-sept pour cent d’entre elles ont trouvé le fait de recevoir un appel téléphonique à la suite du traitement de chimiothérapie à la fois rassurant et utile. Quatre-vingt-trois pour cent ont déclaré que les doses de médicaments pouvaient être ajustées en fonction de la sévérité des effets secondaires. Quatre-vingts pour cent des patientes étaient d’accord pour dire que la plupart des problèmes avaient été résolus lorsqu’elles recevaient l’appel de suivi. Soixante-quatre pour cent d’entre elles jugeaient que l’on avait tenu compte de leurs inquiétudes durant les appels téléphoniques et seulement 22% des répondantes avaient des suggestions pour améliorer le suivi.

Le suivi téléphonique assuré dans le cadre de la chimiothérapie représente un outil précieux qui permet d’évaluer les besoins et les inquiétudes des patientes tout au long des traitements ainsi que les effets secondaires éprouvés. Le suivi téléphonique pourrait faciliter l’identification précoce de problèmes chez les patientes ainsi que la prise en charge pertinente et opportune de ces problèmes.
settings and populations (Rose, Schrader-Bogen, Korlath, Priem & Larson, 1996). It has not been specifically reported in an ovarian cancer treatment environment. Farley (1989) suggested that telephone contacts between the nurse and patients for follow-up and reassurance are important factors in preventing hospitalization. Telephone calls have also been used to assess patient response to treatment and to provide information about self-care strategies that can be used to prevent or ameliorate symptoms and side effects and to evaluate patients’ outcomes (Nail et al.). Nail and colleagues concluded that nursing care delivered by telephone in their ambulatory oncology clinic made a substantial contribution to the total care of their patients.

The gynaecology oncology liaison nurse initiated telephone follow-up in our centre as a means of assessing symptomatic response to chemotherapy and the patients’ ability to manage their side effects. From this assessment, appropriate team members were informed of patient difficulties and actions were implemented to manage their symptoms.

The objective of this study was to assess the impact of and any benefit received from telephone follow-up between chemotherapy treatments for cancer of the ovary.

### Methods

#### 1. Telephone follow-up

Patients with a new diagnosis of advanced stage cancer of the ovary receiving primary chemotherapy were identified as the study population.

Study patients were treated with cisplatin based therapy every three to four weeks in the chemotherapy day care unit. Telephone follow-up was initiated five to seven days post-treatment by the gynaecological oncology nurse. Table One illustrates the information obtained during each call, while the following provides the background framework for each section of the telephone follow-up.

By indicating the type of chemotherapy that patients received and the treatment cycle, the nurse can recognize potential side effects and severity of their symptoms. Assessment and interventions for nausea and vomiting can improve physical well-being and enable the patient to carry out usual daily activities (Grant, 1997).

In order to maintain consistency, it was decided to try to contact the patient within one week post-treatment. Since the call also served as a documentation tool, a message was left if patients were not at home post-treatment, or the nurse spoke to someone other than the patient.

#### Table One: Assessment tool used when calling patients

<table>
<thead>
<tr>
<th>Patient information:</th>
<th>Telephone number:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name: __________________</td>
<td>___________________</td>
</tr>
<tr>
<td>Chart Number: ___________________</td>
<td>___________________</td>
</tr>
</tbody>
</table>

#### 1. Chemotherapy:

Cycle# __________

#### 2. Number of Days Post-Treatment:

_____ Days

Date: _________________ Time: __________________

#### 3. Gastrointestinal Symptoms:

a) Nausea: _____ Never
   _____ Always
   _____ Sometimes
   _____ Before Meals

b) Vomiting: Number of times per day? _____________

c) Appetite: _____ Normal _____ Lower than usual

d) PRN medications:
   _____ Yes _____ No
   _____ Sometimes

#### 4. Activity

_____ Outside the home
_____ Inside the home
_____ Require assistance

Starting on: __________________

If yes: Type: __________________

Route: __________________

Frequency: __________________

Response: __________________

#### 5. Elimination:

Stool: Number of bowel movements/day? _____
   _____ Formed
   _____ Soft
   _____ Liquid
   _____ Abdominal distention
   _____ Passing gas

Other: _____ Weakness
   _____ Lightheaded
   _____ Dizziness

Urine: _____ difficulty urinating
   _____ burning when urinating
   _____ blood in urine
   _____ urinating often: times/day _____________
   _____ times overnight _____________

#### 6. Neurotoxicity:

Numbness/tingling (i.e., able to tie):
   _____ Yes
   _____ No

Other: __________________

#### 7. Other issues:

#### 8. Follow-up appointment:

Signature: __________________
The telephone assessment that was done included: (five to 30 minutes)
- An inquiry regarding the number of days that the patient had experienced the side effects and what may have been some of the contributing factors. If the patient was vomiting, when did it start and for how many days following chemotherapy did it persist? Was the home care nurse contacted? Were the anti-emetics helpful? Were PRN medications required? If so, what was taken, how often and what was the response?
- Inquiry was made concerning nutritional and fluid intake. To assess the adequacy of fluid intake, we also inquired about signs of dehydration.
- The patient’s ability to maintain activities of daily living and her level of fatigue were assessed. Did the patient experience any difficulties with voiding (frequency, burning), and constipation or diarrhea related to chemotherapy? Had they noticed any numbness or tingling in hands and feet? If so, when did it start and had it affected the patient’s level of independent functioning?
- Issues and concerns were then addressed. Topics often discussed at this time included: overview of disease process; risk/benefits of treatment; effects of treatment; coping with diagnosis; and the presence of supportive resources. If supports were not in place, we would then link patients up with the appropriate service (support group, church group) or encourage them to contact a neighbour and friend. Between each treatment, patients were assessed by the gynaecological oncologist at the Ottawa Regional Cancer Centre. Disease response, inter-treatment bloodwork, and any unresolved issues about their disease were addressed at their follow-up appointments.

After each telephone call, the team reviewed the obtained information; changes in symptom management were initiated and documented in the patient’s chart.

2. Impact of survey
Over a period of approximately one year, the gynaecological oncology liaison nurse mailed out approximately 50 letters with questionnaires and return envelopes. Thirty-one patients responded to the six-point questionnaire assessing the impact of the telephone follow-up between chemotherapy treatments. Table Two demonstrates the questionnaire. In addition, all patients were asked to make any comments they felt were relevant to the telephone follow-up process. A patient comment section was included with each question on the survey.

Results
Sixty-two per cent of patients responded to the questionnaire. Eighty-seven per cent of patients who responded found that receiving a call post-chemotherapy treatment was helpful. As one patient said, “The advice by the nurse was extremely helpful to minimize the awful side effects of chemotherapy”. Another patient identified that “it put my mind at ease”.

Eighty-three per cent of patients responded that the questions regarding their chemotherapy side effects were appropriate. Patients felt their medication could be adjusted according to the side effects they were experiencing. “Feeling nauseated, they switched my meds and I was O.K.” “My side effects were not substantial, but I really appreciated the calls.”

In response to question 3a, 88 per cent of patients responded positively that nurses played a vital role in the initial diagnosis by repeating information given to patients and their families. Some of the patient comments were, “The liaison nurses played an important role, especially when the patient is first diagnosed, as patients and their families are in a state of shock, and by endlessly repeating information over and over we can have a better understanding of the disease”. “I was given information I would not have known about.”

Eighty per cent of respondents agreed that most of their issues had been dealt with during the telephone follow-up calls. “We had all our concerns addressed by telephone as we had to travel from out of town.”

Twenty-two per cent of patients had some suggestions on how to improve follow-up in the gynaecology oncology program. Some of the many suggestions were: 1) inform patients that they will be receiving a call in five to seven days after their treatment; 2) telephone call back again two weeks later (mid-cycle); and 3) call after chemotherapy is finished (in remission).

When asked what factors were positive about the telephone callback, patients took this opportunity to make many comments. Some examples were, “It gave my family an opportunity to ask questions or address any concerns arising from the treatment and the disease”. “It gave me a sense of security; it felt like I was not going through the treatments alone and knowing someone cared.” “When living out of town, we didn’t feel so isolated, and my caregivers were better able to assist with my recovery.”

“The fact somebody called made me feel they were genuinely interested, morale booster.” “The telephone follow-up was helpful in that you felt you were not going through treatment alone.” “Settled some of my apprehensions and uncertainties.”

Discussion
Telephone follow-up may be a valuable tool in assessing patient post-treatment symptoms and in providing support. Study findings indicated that a telephone call post-treatment makes a positive impact on the patient’s perception of their care. Quality of life may be enhanced and the ability of patients to complete treatment successfully is more likely with effective outpatient management (Fallowfield, 1992).

Although not specifically measured, it may not be unreasonable to conclude that patient quality of life was enhanced by telephone follow-up. Certainly, over 80% of patients felt that a phone call was of benefit to them. Whether this also translates into an improved ability to complete treatment successfully is still unresolved. Based on the answer to the survey questions and patient comments, the gynaecological oncology team members felt that the majority of patients function very well through the chemotherapy process when telephone follow-up is in place. Other investigators have suggested that a telephone callback system conveys the personal attention a patient is seeking (Chobanuk, Pituskin, Kashuba & Bates, 1999; Stetson, 1986). Secondly, the callback system provides an opportunity for patients to have questions answered by receiving additional information, assurance, or referrals as needed (Riley, 1989). Potentially, telephone follow-up may allow patient problems to be identified early and appropriate interventions initiated. Patients diagnosed with cancer and their families place high priority on information (Cassileth, Zupkis, Sutton-Smith & March, 1980). Written information that had been given to patients was also very beneficial and the telephone calls would reinforce the teaching and
information that had been provided to them during their outpatient treatment. The telephone callback reinforces the information that the patient has received in order to help them deal with their chemotherapy treatments. Hagopian and Rubenstein (1990) found it interesting to note that all subjects in their study indicated that talking was the most effective coping strategy they used. Caring and communication provide the foundation for exemplary nursing and medical care (Hagopian & Rubenstein).

Based on the results of the present study, we have initiated further telephone follow-up with patients on chemotherapy. A diagnosis of ovarian cancer and its subsequent treatment induce anxiety in both the patient and her family. It appears that telephone follow-up may facilitate optimal patient symptom management and provide information to the patient throughout the treatment period.

Acknowledgement
The authors wish to acknowledge the contribution made by the following individuals: L. Jolicoeur, gynaecology oncology liaison nurse and Dr. M. Fung Kee Fung for their assistance and review of the article.

References


