

Cancer in pregnancy

Motherisk on-line question and answer forum

Sandy Grupp Adrienne Einarson RN Gideon Koren MD FRCPC

ABSTRACT

QUESTION It seems to me that cancer is occurring or being diagnosed more frequently among young women who are or might become pregnant. In the past year, I have seen several such women in my practice and I have had difficulty finding appropriate information in order to counsel them. Is there somewhere I can go for information about cancer during pregnancy so that I can better educate and inform these patients?

ANSWER The Motherisk Program at the Hospital for Sick Children supports an on-line Cancer in Pregnancy Forum where physicians and other health care professionals can submit questions or details of experiences that they have had with patients who had cancer during pregnancy. Questions about the safety of chemotherapeutic drugs before and during pregnancy and about possible exacerbation of previous cancer by pregnancy are most common.

RÉSUMÉ

QUESTION Il me semble que, de plus en plus souvent, un cancer se développe ou est diagnostiqué chez des jeunes femmes enceintes ou qui pourraient le devenir. Au cours de la dernière année, quelques femmes dans ma pratique étaient dans cette situation et j'ai eu de la difficulté à trouver de l'information appropriée pour les conseiller. Existe-t-il des sources d'information à propos du cancer durant la grossesse, de manière à ce que je puisse mieux renseigner ces patientes?

RÉPONSE Le Programme Motherisk du Hospital for Sick Children tient un forum en ligne sur le cancer durant la grossesse, qui permet aux médecins et à d'autres professionnels de la santé de poser des questions ou de présenter des renseignements sur les expériences qu'ils ont vécues avec des patientes qui ont eu un cancer durant la grossesse. On y trouve le plus souvent des questions sur la sécurité des médicaments chimiothérapeutiques avant et pendant la grossesse et de l'exacerbation possible d'un cancer antérieur, causée par la grossesse.

Cancer is the second most common cause of death in women of reproductive age, complicating between 0.02% and 0.1% of all pregnancies.¹ This prevalence will likely rise as women are delaying pregnancy until later in life, when the risk of developing cancer increases. The most common malignancies associated with pregnancy include breast cancer, cervical cancer, malignant melanoma, and lymphoma.¹

As it is sometimes a matter of life or death, pregnant women with cancer need to be treated in the same fashion as women who are not pregnant, including receiving chemotherapy, radiation, and surgery, all of which might be teratogenic.² The potential effects of therapeutic interventions on developing fetuses influence physician recommendations and patient decisions regarding choice of chemotherapeutic agents, timing of their administration, and whether pregnancy should be continued.³

To date, studies have shown that administration of cytotoxic drugs during the second and third trimesters poses minimal hazard to developing fetuses. When these drugs are administered during the first trimester, the situation is different.⁴ Avilés et al^{3,4,5} have shown, however, that even when chemotherapy is given in the first trimester, children might be born healthy and have normal neurodevelopment.

Owing to the rare occurrence of cancer during pregnancy, there is a paucity of published data available. As a result, physicians counseling these patients have few resources. The Motherisk program supports an on-line Cancer in Pregnancy Forum for physicians and other health care providers who require information regarding treatment for women with cancer or women who have recovered from cancer and require counseling regarding risks related to breastfeeding or future pregnancy. This forum provides access to expert guidance and a place to share clinical experiences.⁶ It has been in operation

since 2000 and receives questions from individuals around the world.⁶

Questions

Health care providers can access the Cancer in Pregnancy Forum through the Motherisk website (www.motherisk.org). They can either post personal experiences or submit questions, and questions are answered by members of the Consortium of Cancer in Pregnancy. The consortium consists of various physicians with extensive clinical and research experience with cancer in pregnancy. Questions are researched using literature published by Motherisk, other published studies that have been reviewed by the Motherisk team, and textbooks that are used to counsel on the Motherisk help-line. The answer is then posted on-line so it is available to others who access the forum.

We typically answer approximately 75 questions a year from various health care providers. Although the forum was primarily developed for health care providers, patients frequently use it and submit approximately 40% of the questions in the forum. The 5 most common questions are about the following topics:

- the safety of methotrexate during conception,
- the treatment of leukemia during pregnancy,
- the treatment of lymphoma during pregnancy,
- the safety of computed tomography scans during pregnancy, and
- recurrence of cancer during pregnancy.

Experiences

Physicians and other health care providers are encouraged to post any experiences they have had dealing with cancer in pregnancy so that awareness of the topic is raised and so that physicians browsing the site can learn from the experiences of others. It is understandable that physicians might be apprehensive about advising women on the best course of action when dealing with cancer during pregnancy or previous cancer and conception. Some questions have no concrete answers; therefore, it is important to promote discussion in this area and share past experiences so others can learn and we can increase our knowledge base.

The proviso of the on-line Cancer in Pregnancy Forum is that it is not designed or intended to replace any medical advice or to be used for diagnosis.⁶ Owing to unique individual needs and rapid advances in medical sciences,

patients should consult their own physicians to determine the relevance of information to their specific situations before making any decisions about treatment or medication.⁶ Medical professionals should not rely exclusively on the information but should also conduct independent verification of diagnoses, treatments, and drug dosages.

This forum is a tool for health care providers that gives them access to expert guidance and provides a place to share clinical experiences, while at the same time promoting more knowledge and awareness in this area.⁶ The forum provides a vital service for health care providers dealing with women with cancer who are concerned about the risks involved to fetuses or about future conception with cancer treatment. ❁

References

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Motherisk questions are prepared by the Motherisk Team at the Hospital for Sick Children in Toronto, Ont. Ms Grupp is a graduate student at the University of Toronto. Ms Einarson is Assistant Director and Dr Koren is Director of the Motherisk Program. Dr Koren is supported by the Research Leadership for Better Pharmacotherapy during Pregnancy and Lactation and, in part, by a grant from the Canadian Institutes of Health Research. He holds the Ivey Chair in Molecular Toxicology at the University of Western Ontario in London.

Do you have questions about the effects of drugs, chemicals, radiation, or infections in women who are pregnant or breastfeeding? We invite you to submit them to the Motherisk Program by fax at 416 813-7562; they will be addressed in future Motherisk Updates.

Published Motherisk Updates are available on the College of Family Physicians of Canada website (www.cfpc.ca) and also on the Motherisk website (www.motherisk.org).

