

The prevalence of cancer among selected group of Sudanese women with fertility problems

Abstract

Background: Infertility is the major problem in the world and it occurs due to many reasons one of in certain conditions is treatment of cancer.

Justification: There is no published data concerning the association between cancer and infertility.

Objectives: To know the prevalence of cancer among selected group of Sudanese ladies with fertility disorders.

Methods: Descriptive, cross sectional study, from March –May, 2016, at Banoon IVF center, Khartoum, Sudan, 100 Sudanese women with fertility disorders were involved in the study.

Results: The prevalence of cancer among the selected group was 10% (6% was breast cancer, 4% other types of cancer).

Discussion: The prevalence of cancer among the study group was high and that may give us a link between cancer and infertility with strength of this link was increased among the participants with breast cancer, then our study agree with the previous study done by Kutluk Oktay that showed association between breast cancer and infertility.

Conclusion: Further studies should be done involving large sample size from different races.

Keywords: cancer, female infertility, Sudanese

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Introduction

Infertility is a condition of the reproductive system that prevent the conception of children. It affects approximately 10-15% of couples throughout the United States. The diagnosis of infertility is usually given to couples who have been attempting to conceive for at least 1 year without success.¹

Global infertility prevalence rates are difficult to determine, due to the presence of both male and female factors which complicate any estimate which may only address the woman and an outcome of a pregnancy diagnosis or live birth. One in every four couples in developing countries had been found to be affected by infertility.²

When the cause of infertility exists within the female partner, it is referred to as female infertility. Female infertility factors contribute to approximately 50% of all infertility cases, and female infertility alone accounts for approximately one-third of all infertility cases. The most common causes of female infertility include problems with ovulation, damage to fallopian tubes or uterus, or problems with the cervix. Age can contribute to infertility because as a woman ages, her fertility naturally tends to decrease.³

The risk of infertility from cancer treatment depends on many things, like your cancer type, age and pre-treatment fertility status. Treatment specifics such as duration and dose of chemotherapy or radiation and location and scope of surgery or radiation also impact fertility. Specifically, treatment can cause the following:

- The ovaries no longer contain a supply of health eggs
- Damage to the reproductive system prevents a fertilized egg from successfully implanting and growing in the uterus

- Damage to the reproductive system prevents you from being able to carry a pregnancy.⁴

Chemotherapy can stop your ovaries from working. This causes infertility, which can be temporary or permanent. It can also bring on the menopause.

Temporary infertility: With temporary infertility, your periods may become irregular or stop during treatment. But they'll go back to normal once your treatment is over.

This happens in about a third of all women whose periods stop because of chemotherapy. It takes about 6 to 12 months for your periods to go back to normal.

Permanent infertility: Permanent infertility is more likely if you have higher doses of the drugs. It's also more likely in older women than young women – especially if you're getting close to the age where you'd naturally have the menopause. Some chemotherapy drugs can be very damaging to the eggs in your ovaries, so that none are left after treatment. If this happens, you can no longer get pregnant and you might have symptoms of the menopause.⁵

It is also known that there is a higher rate of obstetric complications in patients who have received radiation treatment in comparison with the general population; complications include spontaneous abortions, preterm labor and low-birth weight infants.⁶

Literature review

Study done by Kutluk Oktay et al.,⁷ showed that; BRCA1 mutations are associated with occult primary ovarian insufficiency. This finding

may, at least in part, explain the link between infertility and breast/ovarian cancer risks.

Conclusion

Further studies should be done involving large sample size from different races.

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Conflicts of interest

The author declares there are no conflicts of interest.

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