

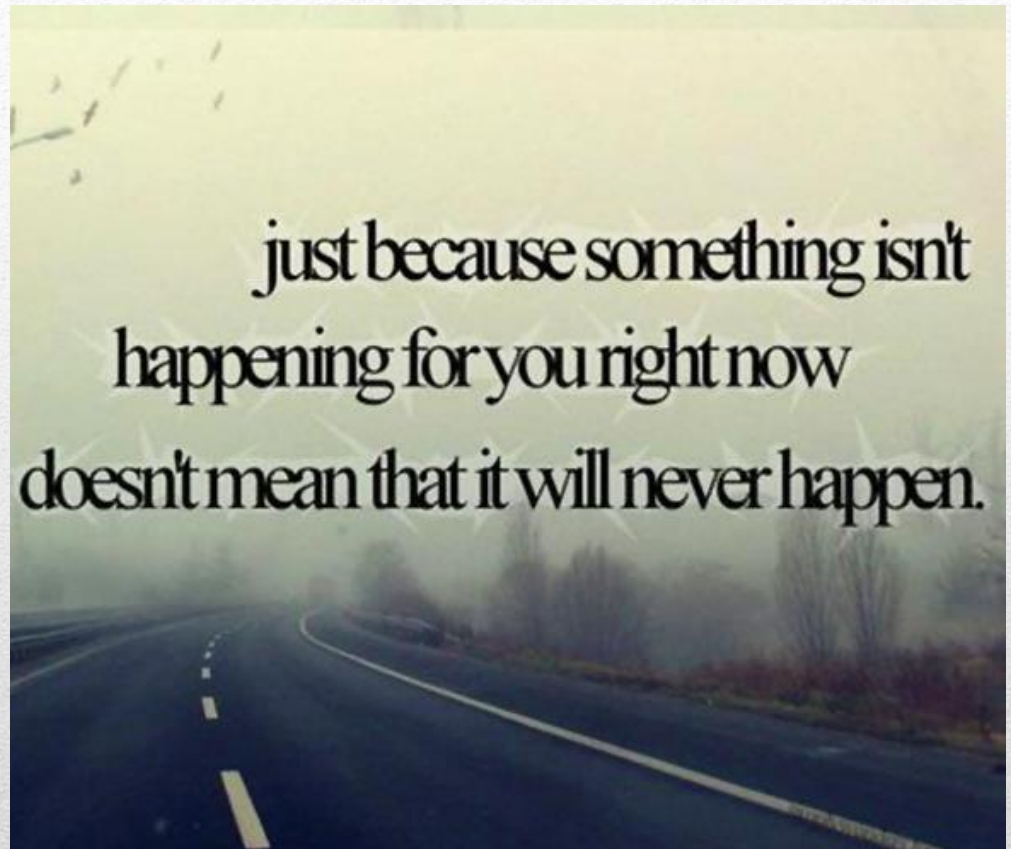
Fertility and Reproductive Issues for Male Survivors

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- Children's Hospital of Philadelphia – Adolescent Male Fertility Preservation Program [video link](#)



Fertility Preservation...

What to Survivors Need to Know?

Understand the potential risks from their treatment.

Understand the options for family building.

Understand available community resources.

Treatments That May Affect Fertility

- Potential for prolonged damage to sperm production:
 - Alkylating agents:
 - Cyclophosphamide (Cytosan)
 - Ifosfamide
 - Procarbazine
 - Busulfan
 - Platinum agents: Cisplatin
 - Etoposide doxorubicin
 - Steroids: Prednisone
 - Interferon
 - Pelvic, testicular, or total body irradiation + chemotherapy
 - Potentially any dose of radiation to the testes
 - Pelvic surgery
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“Low Risk”?

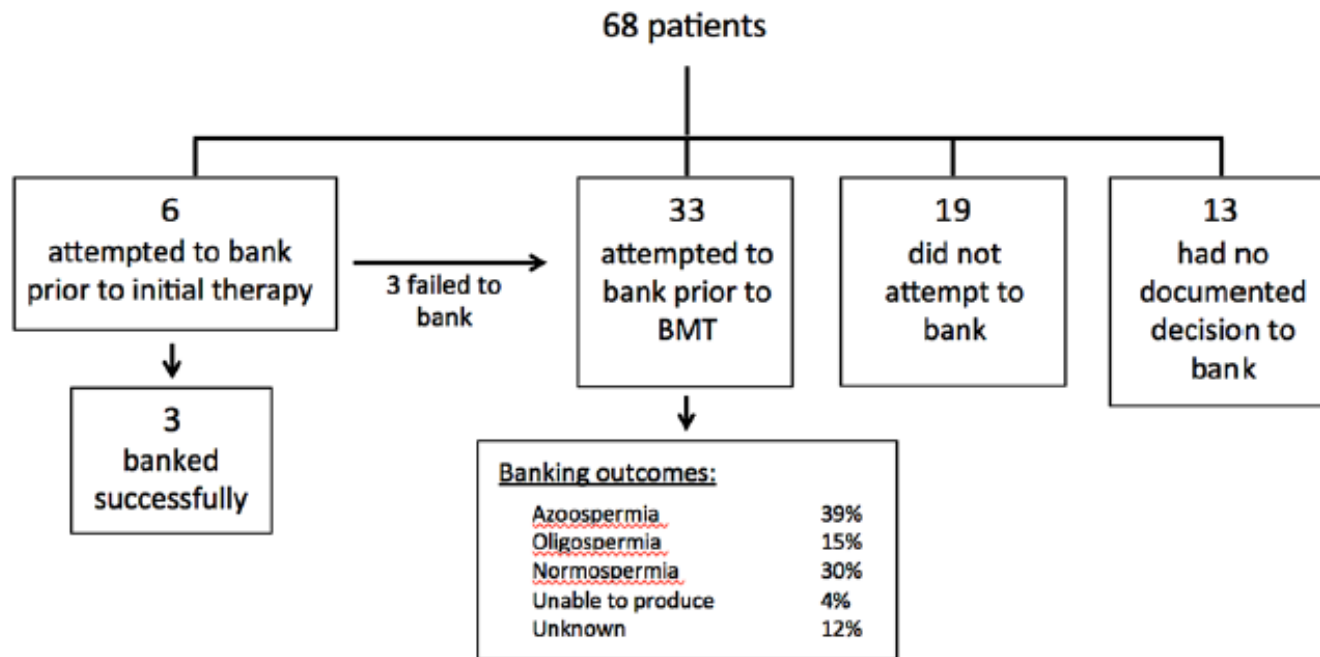


Fig. 1. Decision to bank sperm.

Considerations for children and AYAs

Treatment before puberty in boys does not “protect” the testes.

Most relapse therapies increase the risk of infertility.

Considerations for children and AYAs

However...

There may be natural restoration of the individual's fertility over time in males

Recovery of sperm count can occur several years after completion of therapy

Patient Counseling

- Accurate prediction of outcome is difficult
 - Potential affects of disease on baseline fertility
 - Unknown genetic risks of using sperm banked after the initiation of chemotherapy
 - Males may have recovery over a long period of time
 - Testicular Sperm Extraction **may** be a post-treatment option for azoospermic males
 - History of chemotherapy \neq birth control
-

Options Before and After Treatment

Before
Treatment

During
Treatment

After
Treatment



Sperm Banking
Sperm banking

TESE

Testicular sperm extraction

Testicular Tissue

Freezing

Gonadal Shielding
Gonadal Shielding

Natural Conception

Using Banked Sperm

TESE with ART
Assisted Reproductive Technology

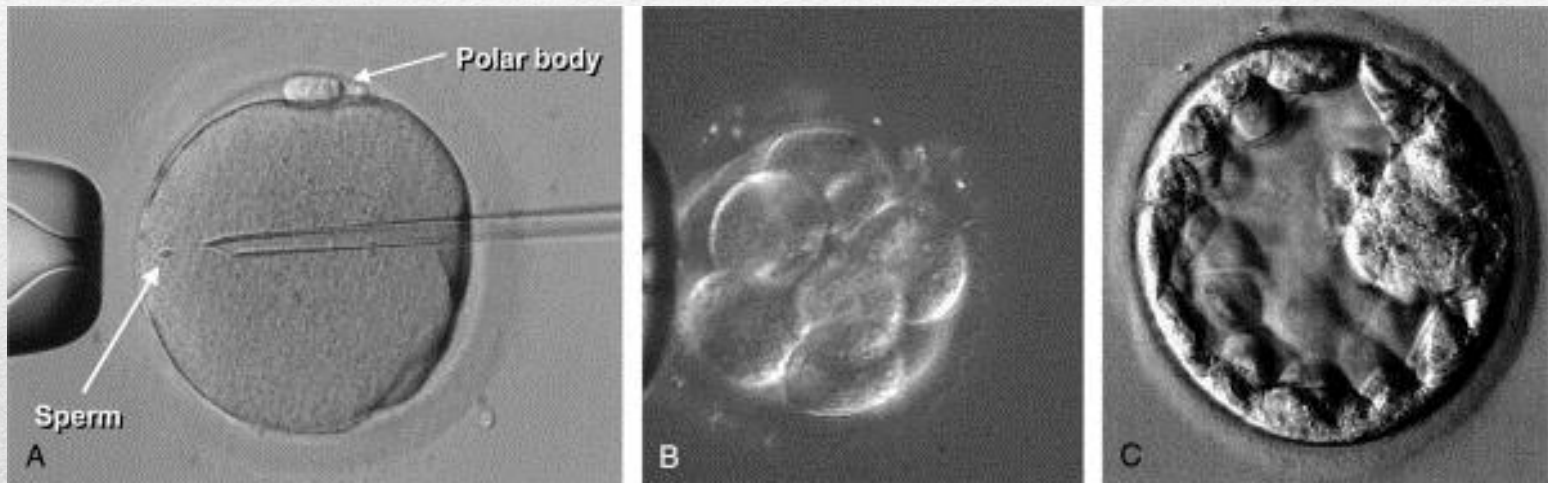
Donor Sperm

Adoption

Conceiving a Child After Cancer

Using banked sperm with IVF

Intracytoplasmic Sperm Injection - ICSI



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Will my children be OK?

Most cancer survivors who are fertile have healthy children:

- Hereditary genetic syndromes and *in utero* exposure to chemotherapy DO increase cancer risk in offspring.
 - Cancer, cancer therapy, and fertility interventions DO NOT increase the risk of cancer or congenital abnormalities in offspring.
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What happens to unused sperm that have been banked?

- Generally, stored sperm can only be used for procreative purposes by the patient and their intimate partner.
- Unused sperm can be donated to a sperm bank, if the donor has undergone testing for certain infectious diseases.
- Donate to another individual or couple in order to attempt pregnancy – also requires infectious disease testing.
- Unused sperm can be disposed of.

Review the consent that you signed when you banked. There are Federal and State rules that apply. Call your sperm bank if you have questions or need to change your preferences.

Community & National Resources

Seattle Reproductive Medicine – Seattle, Bellevue, Tacoma, Spokane

www.seattlefertility.com

Sound Fertility Care – Seattle

www.soundfertility.com

University of Washington Male Fertility Laboratory – Seattle

www.uwmedicine.org

Poma Fertility – Kirkland

www.pomafertility.com

Pacific NW Fertility – Seattle

www.pnwfertility.com

MyOncofertility.org

LIVESTRONG.org/we-can-help/fertility-services/



Questions?
