Frozen testicle tissue yields healthy baby mice

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Sperm grown from the frozen testicle tissue of newborn mice has been used to produce healthy offspring, in a hopeful development for men left infertile by childhood cancer treatment, researchers said Tuesday.

In a process called spermatogenesis, the sperm was grown in a lab from testicle tissue that had been frozen for more than four months, they said, then deposited directly into immature egg cells to yield mouse babies.

The offspring were healthy and able to reproduce in adulthood, the study authors from Japan wrote in the journal *Nature Communications*.

Cryopreservation of testicle tissue taken from boys due to receive cancer treatment has long been mooted as a way of preserving their fatherhood prospects.

Recent advances in cancer treatment have boosted the survival rate of juvenile cancer patients, and infertility has become a bigger concern, said the team.

"Although they may not be easy and require further investigation... spermatogenesis of other animals including humans are expected to be successful in the future," they wrote.

"When this goal is realised, testis tissue cryopreservation will become a practical means to preserve the reproductive capacity of pre-pubertal male cancer patients."
More information: Offspring production with sperm grown in vitro from cryopreserved testis tissues, *Nature Communications*, DOI: 10.1038/ncomms5320

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