Male sterility may be correctable through stem cell treatments, if mice studies lead to human cure

A common genetic cause of male infertility has been overcome in mice using a technique that creates healthy sperm in the laboratory, scientists have shown.

The research raises the future prospect of hope for men who cannot father children because they have three instead of two sex chromosomes.

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Scientists at London's Francis Crick Institute, working with Japanese colleagues, used a stem cell technique to produce sperm from small pieces of connective tissue taken from the ears of infertile male mice.

The mice either had an extra female X or male Y chromosome in addition to the usual XX or XY pairing.

During the process of transforming the fibroblast connective tissue cells into multi-purpose stem cells, some of the unwanted extra chromosomes were lost.

The researchers selected those stem cells lacking the extra chromosome and used chemical signals to coax their development into immature sperm cells.

Once injected into the testes of a host mouse, the cells matured to become healthy and properly functioning sperm. These were then used to fertilise eggs and produce healthy, fertile offspring.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: <u>New sperm creation method could overcome genetic male infertility</u>