Infertility in women linked to gene vital to heart, kidney development, cancer suppression

It has been estimated that more than 80 million people in the world have an unfulfilled desire to have children. But for every 10th couple, the reasons remain unclear. Now, researchers from the Leibniz Institute on Aging (FLI) in Jena/Germany have, together with clinical partners, found a gene mutation that leads to infertility in women.

Researchers investigated samples of women younger than 40 years that suffer from unwanted childlessness. In one out of eight women, the gene WT1 showed a previously unknown mutation in one of its two alleles. “This result was really surprising”, explains Abinaya Nathan, who is the study’s first author. “Up to now, WT1 was only known as tumor suppressor gene important for the development and maintenance of organs like heart or kidney”.

“Results for mice and humans are very similar, showing that this function of the Wt1 gene is highly conserved in mammals”, Dr. Verena Holschbach from the Heidelberg University Women’s Hospital emphasizes. “The new WT1 gene mutation, which we have found, causing the premature activation of proteases already in the ovary, offers completely new approaches to help childless couples to fulfill their desire to have children”, the researchers conclude. The next steps will be even broader clinical patient screenings and a more detailed examination of how to alter the womb milieu.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: New gene mutation leads to infertility in women

For more background on the Genetic Literacy Project, read GLP on Wikipedia.