Fetal cells stay in mom’s body long after pregnancy

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Recently, a team of pathologists at Leiden University Medical Center in the Netherlands carried out an experiment that might seem doomed to failure.

They collected tissue from 26 women who had died during or just after pregnancy. All of them had been carrying sons. The pathologists then stained the samples to check for Y chromosomes.

Essentially, the scientists were looking for male cells in female bodies. And their search was stunningly successful.

As reported in the journal Molecular Human Reproduction, the researchers found cells with Y chromosomes in every tissue sample they examined. These male cells were certainly uncommon — at their most abundant, they only made up about one in every 1,000 cells. But male cells were present in every organ that the scientists studied: brains, hearts, kidneys and others.

In the 1990s, scientists found the first clues that cells from both sons and daughters can escape from the uterus and spread through a mother’s body. They called the phenomenon fetal microchimerism, after the chimera, a monster from Greek mythology that was part lion, goat and dragon.

In recent years, researchers have found many clues suggesting that microchimerism can affect a woman’s health. Tumors may be loaded with fetal cells, for example, suggesting that they might help drive cancer. Yet other studies have suggested that fetal microchimerism protects women against the disease.

Read full, original post: A Pregnancy Souvenir: Cells That Are Not Your Own