Possible miscarriage gene found: study

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Recurrent spontaneous abortion is defined as a woman suffering three or more miscarriages within the first five weeks of pregnancy. It affects about one in every 100 pregnancies

Scientists said Wednesday they had linked mutations in a specific gene with an increased risk of recurrent miscarriages, offering hopes of better diagnosis and treatment for affected women.

The gene, dubbed FOXD1, was first pinpointed in lab mice, a team of international researchers wrote in the Royal Society Journal *Open*

Biology.

They then investigated whether 556 women affected by "recurrent spontaneous abortion" or RSA, had mutations in the same gene. They did.

RSA is defined as a woman suffering three or more miscarriages within the first five weeks of pregnancy. It affects about one in every 100 pregnancies.

A control group of 271 non-RSA sufferers were also included in the study.

"We found that women with FOXD1 mutations have a statistically high risk of suffering RSA," said the team.

They also found one variant present only in the control group of women with no history of miscarriage, and speculated it may be protective.

It is not the first gene implicated in repeated miscarriage, though "functional evidence" of their involvement has been rare, the team wrote.

More information: Association of FOXD1 variants with adverse pregnancy outcomes in mice and humans, *Open Biology*, rsob.royalsocietypublishing.or … /10.1098/rsob.160109