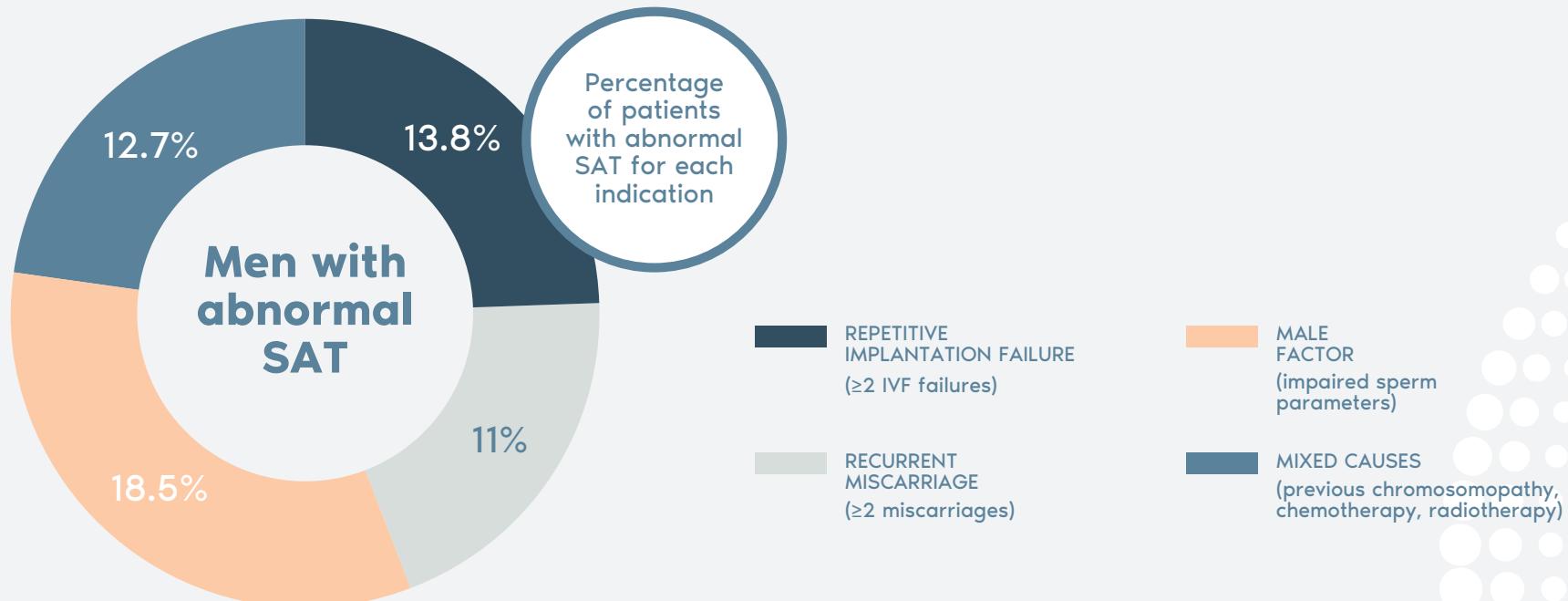


The SAT test is a diagnostic tool to study male infertility. It allows us to evaluate the presence of an abnormal number of chromosomes in the sperm.

The chromosomes 13, 18, 21, X and Y, are frequently implicated in pregnancy loss and affected children with chromosomal abnormalities.

The SAT test is a useful tool to provide a more personalized genetic counseling to the couple before their in vitro fertilization treatment.



RESULTS

An increase of sperm chromosomal abnormalities affects reproduction on 3 levels:



EMBRYO LEVEL

- Spermatozoa with sex chromosome abnormalities result in aneuploid embryos.
- Diploid sperm results in triploid embryos.
(Rodrigo et al., 2010)



PREGNANCY LEVEL

- An elevated SAT decreases pregnancy rates after ICSI.
- And increases miscarriage rate.
(Rubio et al., 2001)



OFFSPRING LEVEL

- It increases the risk of abnormal offspring for the chromosomes detected in the sperm (Down, Klinefelter or Turner's syndromes).