

Recurrent Spontaneous Abortions: An Overview of Genetic and Non-Genetic Backgrounds

Aruna Meka and B. Mohan Reddy*

Biological Anthropology Unit, Indian Statistical Institute, 203 Barrackpore Trunk Road, Kolkata 700 108, West Bengal, India

KEYWORDS Recurrent spontaneous abortions; HLA and other genes associated; psychosomatics; abortions in India

ABSTRACT Recurrent Spontaneous Abortion (RSA), Habitual Abortion or Habitual Miscarriage is the loss of 3 or more consecutive pregnancies before the 24th week of gestation. RSA occurs chiefly due to either a problem with the pregnancy or when there is a problem in the environment where it implants and further development occurs. 10-15 % of women with recurrent early pregnancy loss have congenital uterine abnormalities. The role of infections, hormonal imbalances, nutritional deficiencies, and grief has been studied but the results are contradictory from one study to the other suggesting a need of further study. Genetic basis of RSA is poorly understood. Single gene mutations, polygenic, and cytogenetic factors are all found to show association with RSA. In approximately 2-4% of couples with recurrent pregnancy loss, one partner will have a genetically balanced structural chromosome rearrangement. This review looks into the various factors associated with RSA in the West and in the work done in this area in India. It also emphasizes on the need for an appropriately designed framework to study the various aspects of RSA.