Psychological characteristics of and counseling for carriers of structural chromosome abnormalities

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Received November 26, 2015
Accepted January 18, 2016
Published April 26, 2016
DOI http://dx.doi.org/10.4238/gmr.15028159

ABSTRACT. Infertility as a psychological problem has gained increasing attention. Male partners among infertile couples have elevated levels of psychological distress, which could affect semen quality, result in hormonal abnormalities, and increase the occurrence of early miscarriage. Infertile women are more vulnerable to psychological distress and require psychological support. Subfertile women who conceive after assisted reproduction have higher stress, anxiety, and depression levels. Psychological interventions have been shown to have beneficial effects on infertility patients. However, psychosocial characteristics of carriers of structural chromosome abnormalities have not been studied. We report the characteristics of carriers of structural chromosome abnormalities and their influence on psychological counseling. Seventy-five patients were carriers of reciprocal translocations, 25 carried Robertsonian translocations, 17
carried inversions, 10 carried deletions, and 3 carried isochromosomes. The main clinical characteristics were recurrent spontaneous abortion, oligospermia, azoospermia, primary amenorrhea, and fetal death. Self-rating anxiety scale (SAS) and self-rating depression scale (SDS) scores of women with structural chromosome abnormality were significantly higher than those scores of women with normal karyotype. SAS and SDS scores of men with structural chromosome abnormality were significantly higher than those of men with normal karyotype. SAS and SDS scores of women with structural chromosome abnormality were significantly higher than their scores of men with structural chromosome abnormality. Women carriers with structural chromosome abnormality were more vulnerable to psychological distress. Psychosocial counseling for carriers of structural chromosome abnormalities should focus on self-confidence and treatment with assisted reproductive technology.

**Key words:** Infertility; Structural chromosome abnormality; Anxiety and depression; Psychological counseling