
Screening of thrombophilia in women with failure of embryo implantation: far from being recommended

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Whether or not maternal thrombophilia due to the most common gain-of-function mutations in factor V (factor V Leiden) and prothrombin gene (G20210A prothrombin), has a role in favouring or contrasting the embryo implantation after assisted reproductive procedures is a matter of debate. Only few studies are available on this issue. On one hand, it has been suggested that carriers of factor V Leiden have a selective advantage in embryo implantation, occurring more frequently at the first attempt than in non-carriers.¹ On the other hand, these data were not confirmed by others² and Grandone and colleagues found not only the lack of such a selective advantage, but a possible association between thrombophilia and failure of 3 or more attempts of embryo transfer.³ In our study,⁴ when women were stratified according to the number of embryo transfers attempted, we found a similar frequency of thrombophilia markers in any group. Given the paucity of data and the uncertainties on the relationship between

embryo implantation after assisted reproductive procedures and thrombophilia, we believe that suggesting a routine screening for thrombophilia in infertile women is at present unjustified, even in women with 3 or more implantation failures. More studies of adequate sample size are needed to elucidate the causes of failure of embryo implantation and the role of thrombophilia.

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