

Association of azoospermia factor region deletions in infertile male subjects among Malaysians

ABSTRACT

Azoospermia factor region (AZF) deletions (AZFa, AZFb, AZFc and AZFd) in the Y chromosome were analysed in male infertility subjects in various populations with conflicting results. This study comprised of 54 infertile males and 63 fertile controls, and the frequency of AZFa, AZFb, AZFc and AZFd deletions were determined using conventional polymerase chain reaction (PCR) as well as real-time PCR-high resolution melting analysis-based methods. The results of this study showed that, three of 54 cases (5.55%) had AZF (a, b and c) deletions (two had AZFc and one had AZFa deletions). Four cases were found to have AZFd deletions (7.4%) with two of them being associated with AZFc deletions ($P = 0.028$). The frequency of AZF (a, b and c) deletions in Malaysian infertile male subjects was found to be comparable with other populations. AZFd deletions were found to be significant ($P < 0.05$) in male infertility and it may be associated with other types of AZF deletions.

Keyword: Azoospermia factor region; High resolution melt; Male infertility