Y-chromosomal microdeletion in Idiopathic Azoospermic and severe Oligozoospermic Indonesian men / Ponco Birowo, Donny E. Putra, Mewahyu Dewi, Akmal Taher

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Abstrak

ABSTRACT
Aim: to detect Y-chromosomal microdeletion in Indonesian men with azoospermia or severe oligozoospermia using multiplex PCR. Methods: we performed 2 multiplex PCR amplifications of the Azoospermia Factor (AZF) region in 71 men. Criteria for including a patient were fulfilled if they presented with azoospermia or severe oligozoospermia, with or without additional abnormalities of sperm motility or of head morphology, raised or normal levels of FSH, normal levels of LH and testosterone, and with no evidence of testicular tumors or other abnormalities. Five men participated as control persons. Results: partial deletion of AZFa was found in 11 men (15.49%), complete deletion of AZFb in 1 man (1.4%), and complete deletion of AZFc in 1 man (1.4%). The unspecific type of deletion was also detected, including the DBY gene in 2 men (2.81%), and partial deletion of both AZFa and AZFb in 2 men (2.81%). No AZF deletion was observed in the control probands. Related to the type of deletion, the AZFa and AZFb deletion showed spermatogenesis arrest in most tubules, while deletion of the DBY gene is associated with the sertoli cell only (SCO) syndrome. Conclusion: the frequency of partial deletion of AZFa was found to be relatively high in our center. The type of deletion is associated with the testicular histology.