reparative process. This is due to reliable stabilization of the blood clot in the wound by the barrier membrane and the chemoattractant effect of collagen for participants in inflammatory process.

Prospects for further research. The study of the reparative processes of the bone tissue of the jaws with guided bone regeneration is a promising scientific direction. Taking into account biochemical parameters, we found that the barrier membrane, being a foreign body, does not contribute to the enhancement of the postoperative inflammatory reaction, but plays a preventive role and prevents the development of postoperative complications.

References

Key words: barrier membranes, guided tissue regeneration, alkaline phosphatase.

MOLECULAR BIOMARKER OF Y CHROMOSOME AND CFTR GENE IN INFERTILE MALES

Racoviţă S.¹, Moşin V.¹, Sprincean M. ¹,²
¹State University of Medicine and Pharmacy Nicolae Testemitanu,
²Institute of Mother and Child, Chisinau, Republic of Moldova

Male infertility due to azoospermia has been associated with genetic risk factors in 15%–30%. The most common molecular causes are Y chromosome (AZF region) and mutations in the cystic fibrosis transmembrane conductance regulator (CFTR) gene. The Purpose: To determine Y-chromosome microdeletions of the AZF and CFTR gene mutations in azoospermic infertile men, before assisted reproductive techniques (ART).

Materials and Methods: Our study was carried out on 25 infertile men recruited among infertile couples referred for ART treatment. All patients signed an informed consent. Criteria for including a patient were fulfilled if they presented with azoospermia, raised or normal levels of FSH, LH and testosterone. They were investigated by molecular testing for AZF and CFTR gene. Multiplex Polymerase chain reaction (PCR) was performed using Y-specific markers for AZF region: sY84, sY86 (AZFa); sY124, sY134 (AZFb); sY254, sY255 (AZFc), and internal controls: sY14/SRY and ZFX/ZFY. Two common mutations of the CFTR gene were tested ΔF508 and G542X.

Results: We identified in two patients deletions of Y chromosome in the AZFc regions deleted markers were sY254 and sY255 both for the DAZ (Deleted in Azoospermia) gene. They showed slightly elevated FSH and low testosterone. In one patient microdeletions were detected in each region of AZFa-sY84, sY86; AZFb-sY124, sY134; AZFc-sY254, sY255 and presence of SRY and ZFY, hormonal markers was in normal. One man also carried a CFTR gene mutation ΔF508, for calculating the risk of recurrence in offspring was investigated and his wife, found himself homozygous.

Conclusions: All male with severe semen analysis should be offered genetic testing and counseling prior assisted reproduction is applied.

Key words: infertility; male; AZF region; azoospermia; ΔF508