

International Conference on Cytopathology

August 31-September 02, 2015 Toronto, Canada

Role of testicular cytology in evaluation of male infertility with special reference to ‘testicular mapping’

Ravi Mehrotra

Institute of Cytology and Preventive Oncology, India

Azoospermia is present in about 10-15% of men evaluated for infertility and represents the final result of different testicular alterations ranging from normal spermatogenesis with seminal tract obstruction or absence of vas deferens (obstructive azoospermia) to different problems of the spermatogenic process including hypospermatogenesis, maturation arrest and complete absence of germ cells (non obstructive azoospermia). Advances in assisted reproductive techniques (ART) have revolutionized the ability to help men with even the severest forms of male infertility to become fathers. Although finding sperms in men with obstructive azoospermia is not difficult, locating and retrieving spermatozoa in men with non-obstructive azoospermia remains a clinical challenge largely because sperm production in these men can be patchy or focal in nature. In response to this challenge, strategies such as fine-needle aspiration (FNA) mapping have been developed to find spermatozoa. The use of testicular FNA “mapping” to systemically assess and localize sperm for ART in men with azoospermia and with testicular failure characterized by “patchy” or “focal” spermatogenesis is an innovative development in this field. A simple map (<4 sites/testis) is used to confirm the clinical expectation of sperm production in men who may be obstructed and azoospermic. On the other hand, compound map (>4 sites/testis) is typically performed as a diagnostic test to find sperm in failing testes. FNA mapping has gained considerable traction as an informative, ‘testis sparing’ technique for sperm detection in non-obstructive azoospermia performed on outpatient basis making it inexpensive, time-saving and painless procedure.

rm8509@gmail.com

ThinPrep 5000 and conventional techniques: Which one is superior in preparing peritoneal and pleural fluid smears?

S Babu Rajan

Sultan Qaboos University, Oman

The cytology of serous fluid has an important role in the detection of malignant cells. The aim of this study was to compare slide preparation using conventional method and ThinPrep 5000 and to study the possibility of replacing the conventional method with ThinPrep 5000 in the preparation of serous fluid slides at Sultan Qaboos University Hospital (SQUH). This comparison is important to evaluate the usefulness of each method in cytology. 41 samples of serous fluid which include 24 peritoneal fluids and 17 pleural fluids were taken from SQUH and smears were then prepared using both techniques. Most of the conventional smears had high cellularity (mesothelial cells) with background showing increased number of inflammatory cells and blood. However, slides prepared by ThinPrep 5000 showed reduction in these parameters. The findings of this study suggest that ThinPrep 5000 technique can be run in parallel to the conventional method. However, further studies are required to investigate the possibility of completely replacing the conventional method with ThinPrep 5000.

drsbaburajan@yahoo.co.in