2WCII 2016

2016 2ND WORLD CONGRESS ON INTEGRATION AND ISLAMICISATION

FOCUS ON MEDICAL AND HEALTHCARE SCIENCES

Abstract book

Theme:

Incorporating Moral Values & Maqasid Al-Shari'ah into Medical & Health Care Practices

P137: Identification of *VASA* Gene Expression In *In-Vitro* Culture From Non-Obstructive Azoospermia (NOA) Testicular Biopsy Cells: A Study To Unlock Knowledge Of Male Infertility

MI Lokman[1,2*], MY Afzan[2.3], YAW Azantee[4], R Roszaman[5]

[1]Department of Basic Medical Sciences, Kulliyyah of Nursing, International Islamic University Malaysia, Kuantan, Pahang, Malaysia.
[2]Integrated Cellular and Molecular Biology Cluster (iMolec), International Islamic University Malaysia, Kuantan, Pahang, Malaysia
[3]Department of Biomedical Science, Kulliyyah of Allied Health Sciences, International Islamic University of MalaysiaKuantan, Pahang, Malaysia
[4]Department of Obstetrics & Gynaecology, Kulliyyah of Medicine, International Islamic University Malaysia, Kuantan, Pahang, Malaysia.
[5]IIUM Fertility Centre, Kuantan, Pahang, Malaysia.

ABSTRACT
The expression product of *VASA* gene is widely conserved germ line marker and participates to regulate the development of reproductive system and spermatogenesis in healthy man. Azoospermic is a condition which cannot produce sperm cells for reproduction activity. In Islam, seeking knowledge is an obligatory to each Muslim in order to solve problems and for a better live. Thus to unveiled the problem of azoospermic in infertile man we attempt to determine the gene expression of *VASA* level in testes cells of non-obstructive azoospermic (NOA) sample. Samples were taken from three NOA patients by testicular sperm extraction (TESE) to obtain testicular biopsyies. Testicular cells were isolated and cultured in supplemented knockout DMEM media. *VASA* gene expression was determined by reverse transcriptase polymerase chain reaction (RT-PCR) for spermatogonial marker. No *VASA* expression was detected in spermatogonial-like stem cells culture on day 1, 7, 14 and 21. Our finding shown *VASA* gene was not expressed *in vitro* culture spermatogenesis might be associated with the abnormal differentiation of primordial germ cells that lead to male infertility.

KEYWORDS: *VASA; non-obstructive azoospermia; spermatogenesis; testicular cells; RT-PCR*