



2WCII 2016

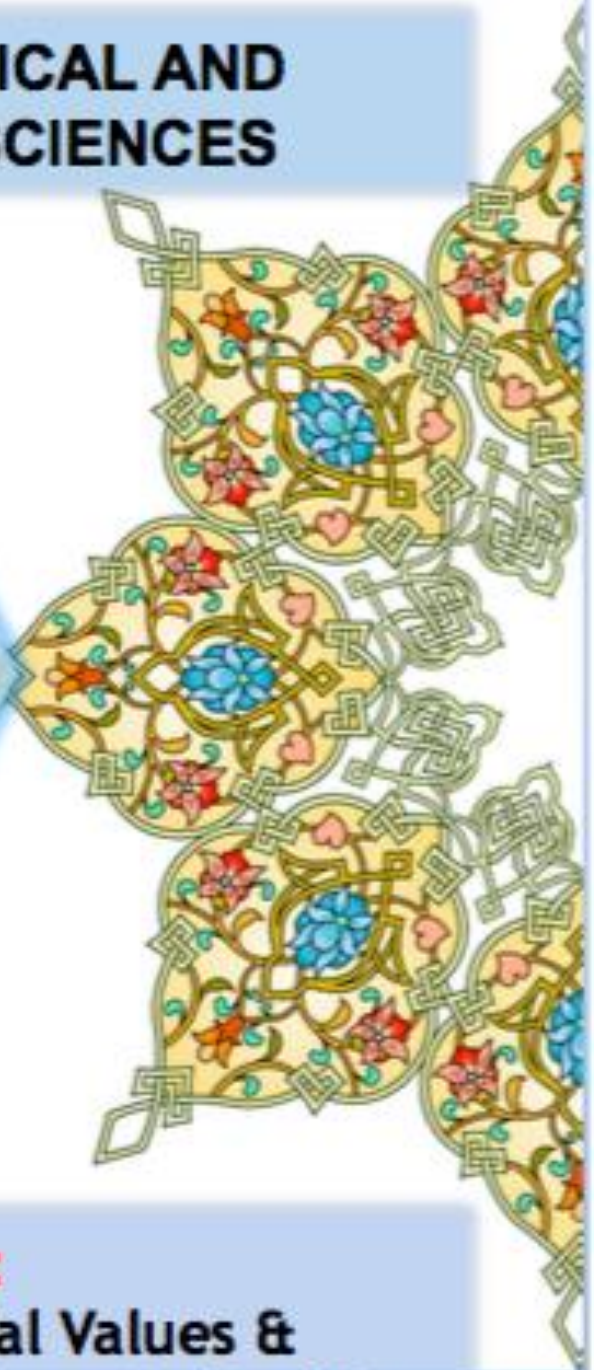
2016 2ND WORLD CONGRESS ON INTEGRATION AND ISLAMICISATION

**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 Azantee⁴, R Roszaman⁵

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 Malaysia Kuantan, Pahang, Malaysia*

⁴*Department of Obstetrics & Gynaecology, Kulliyyah of Medicine, International Islamic University Malaysia, Kuantan, Pahang, Malaysia.*

⁵*IUM 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 biopsies. 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