6th MTERMS 2016

Malaysian Tissue Engineering and Regenerative Medicine Scientific Meeting

in conjunction with

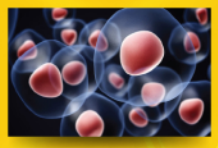
2nd Malaysian Stem Cell Meeting

"Ensuring sustainability through innovative regenerative technologies"

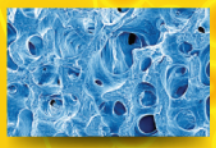
17th - 18th November 2016

The Light Hotel
Seberang Jaya, Penang

Topics



- Reprogramming and pluripotency
- Stem Cell and Cancer



- Biomaterials and Tissue Regeneration
- Transplantation and immunomodulation

- 3D Bioprinting and tissue engineering

- Cell and Gene Therapy
- Imaging and Pre-Clinical Model

Organised by

Institut Perubatan & Pergigian Termaju (IPPT), USM and
Tissue Engineering & Regenerative Medicine Society of Malaysia (TESMA)

Co-organised by

Malaysian Society for Stem Cell Research and Therapy (MSCRT)

P-NPR 4

Effect of Qur'anic recitation on chondrocytes growth using scratch wound assay: work in Progressp

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Purpose: This study aims to identify the potential effects of the Qur'anic recitation, particularly *Surah Al-Fatihah* on the wound healing activity of chondrocytes derived from rabbit articular cartilage.

Methods: A serially cultured and expanded chondrocytes was used in this study. A cellular model was established in vitro and divided into four groups. The first and second groups were exposed to recitation of *Surah Al-Fatihah* and an Arabic poem respectively.The third group was exposed to a Western poem recitation. The exposure duration of the recitations to all groups was standardized to 14 minutes. The fourth group was not exposed to any sound and serves as control. As the cells reach 80-90% confluency, a single line or scratch wound was introduced. Growth kinetics assessment was performed to study the healing activities within each group. Any significant changes were recorded as photomicrograph.

Results: Initial findings showed that the cells exposed to Qur'anic recitation showed faster and favourable healing effect compared to Arabic and Western poem. Growth rate, cell viability and total number of doubling were found to be increased with the Qur'anic recitation. Future work involving more samples will be conducted to validate these initial findings. It is found that the Qur'anic recitation was able to increase the proliferation and reduce the time to heal. The use of the Qur'anic recitation can be utilized to facilitate the cartilage regeneration in tissue engineering studies.

Conclusion: This preliminary study exerts the positive effect of Qur'anic recitation on the wound healing activity of chondrocytes.