Annals of Stem Cell Research & Therapy

9

Extracellular Vesicles Derived from Mesenchymal Cells for Wound Healing: *In Vitro* Scratch Assay

Valeria Calcaterra^{1*}, Maria Antonietta Avanzini², Melissa Mantelli² and Gloria Pelizzo³

¹Department of Maternal and Children's Health, University of Pavia, Italy

²Department of Maternal and Children's Health, Fondazione IRCCS Policlinico S Matteo, Italy

³Department of Pediatric Surgery, Mediterranean Institute for Pediatric Excellence, Italy

Clinical Image

Rabbit skin fibroblasts (1 × 10⁵/well) were plated in Cytoselect 24 well wound healing assay (DBA, Milano, Italy) and incubated at 37°C, 5% CO₂. When they reached confluence, inserts were removed and rabbit Extracellular Vesicles (EV) derived from mesenchymal cells suspension was added. Cultures were followed for 24 hours and images were taken by an inverted microscope (Leitz, Wetzlar, Germany). Results demonstrate that EV promoted proliferation and/or migration of rabbit skin fibroblast. Panel A. Healing assay with only culture medium: the scratch (delimited between the dotted lines) is open; Panel B. Healing assay in presence of EV: the scratch is completely closed (Figure 1).

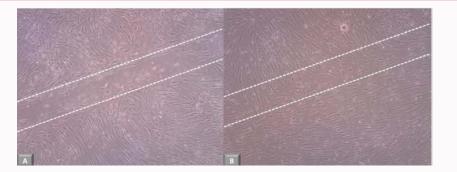


Figure 1: (Panel A) Healing assay with only culture medium: the scratch (delimited between the dotted lines) is open; (Panel B) Healing assay in presence of EV: the scratch is completely closed.

OPEN ACCESS

*Correspondence:

Valeria Calcaterra, Department of Maternal and Children's Health, Pediatric Endocrinology Unit, Fondazione IRCCS Policlinico S. Matteo & University of Pavia, P.le Golgi n.2, 27100 Pavia, Italy, Tel: +390382502930; Fax: +390382527976; E-mail: v.calcaterra@smatteo.pv.it Received Date: 16 Aug 2018 Accepted Date: 28 Aug 2018 Published Date: 30 Aug 2018

Citation:

Calcaterra V, Avanzini MA, Mantelli M, Pelizzo G. Extracellular Vesicles Derived from Mesenchymal Cells for Wound Healing: In Vitro Scratch Assay. Ann Stem Cell Res Ther. 2018; 2(4): 1023.

Copyright © 2018 Valeria Calcaterra. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.