

B-36 \*Dr Roza Haghgoo; \*\* Dr Farid Abbasi, \*\* Dr Hassan Semyari

\* Department of Pediatric Dentistry, Dental School, Shahed University, Tehran, Iran

\*\* Department of Oral Medicine, Dental School, Shahed University, Tehran, Iran

\*\*\* Department of Periodontics, Dental School, Shahed University, Tehran, Iran

E-mail : haghgoodent@yahoo.com

### Review On Stem Cells In Regenerative Dentistry

**Purpose :** The aim of this article is to review application of stem cells in regenerative dentistry.

**Materials and Methods :** Article relating to application of stem cells in regenerative dentistry were gathered and evaluated.

**Results :** Dental tissues such as periodontal ligament, dental papilla are the sources for undifferentiated. Dental stem cells can be used for treating dental diseases like periodontitis, dental caries and also improving dental pulp healing and regeneration of craniofacial bone and teeth.

**Conclusion :** Results of related studies reveal that dental stem cells are valuable tools for dental tissues engineering.

B-53 Toyoko Harada, Koji Harada and Yoshiya Ueyama

Department of Oral and Maxillofacial Surgery, Yamaguchi University Graduate School of Medicine

E-mail : paitan0830@yahoo.co.jp

### Therapeutic Efficacy Of Granulocyte Colony Stimulating Factor On The 5-FU-Induced Mouse Dermatitis

**Purpose :** In these years, Granulocyte colony stimulating factor (G-CSF) have attracted attention as a new approach for mucositis in foreign countries because it has found that G-CSF may have acceleration effects of epithelialization and mucosal protective effects. In the present study, we examine the effectiveness of Lenograstim against dermatitis as adverse effect of cancer chemotherapy.

**Materials and methods :** We tried to establish a model of 5-fluorouracil(5-FU)induced mouse dermatitis. We also administer Lenograstim (2µg/kg/day) for 3 days to mouse with 5-FU-induced dermatitis subcutaneously, and that examined the healing process of dermatitis histologically. Next, we tried to establish primary culture of fibroblasts derived from mouse back skin. We investigate the effects of Lenograstim on the growth of fibroblasts by MTT assay, on the migration of fibroblasts by Wound healing assay, on the cytokine expression related to healing acceleration by Western blotting.

**Results :** Lenograstim could promote the healing of 5-FU-induced dermatitis significantly. In addition, Lenograstim (0.01µg/ml) stimulate fibroblasts proliferation and their migration, and that enhanced bFGF expressions. Moreover, Lenograstim administration increased bFGF expressions and decreased α-SMA expressions in healing process of 5-FU-induced dermatitis.

**Conclusion :** These findings suggested that Lenograstim might promote the healing of 5-FU-induced dermatitis through the induction of bFGF expressions without fostering scar formations.