A-59 Pei-Ying Chang[1,2], Chia-Ming Chang[1,2], Ming-Gene Tu[1,2], Michael Yuanchien Chen[1,2], Jai-Sing Yang[3]

Department of [1]Dentistry, [3]Biological Science and Technology, China Medical University, Taichung 404, Taiwan; [2]Department of Oral Maxillofacial Surgery, China Medical University Hospital, Taichung 404, Taiwan, R.O.C.;

E-mail : dawn0326@pchome.com.tw

Curcumin-Loaded Nanoparticles Induces Apoptotic Cell Death in Cisplatin-Resistance Human Oral Cancer Cells

Curcumin has been known to induce apoptotic cell death in a variety of cancers, but little is demonstrated in cisplatin-resistance human oral cancer cells. Our laboratory combined with nano-technology, development of new water-soluble curcumin nanoparticles Cur-NPs, and to explore the molecular mechanism of cisplatin-resistance oral cancer cell line. Our results show that: (1) Cur-NPs inhibited the growth of cisplatin-resistance human oral cancer cells in a dose-dependent manner and an IC50 value of Cur-NPs was 4 μg/mL, 24 h treatment using MTT assay. (2) Microscopy observations confirm that 4 μg/mL, of Cur-NPs treatment can induce cisplatin-resistant oral cancer cell death. (3) Cur-NPs induce DNA concentration by DAPI staining. (4) An increase of the active form of caspases-3 expression was found in the Cur-NPsv-treated cells, and the caspase activities were also elevated. (5) Cur-NPs-triggered apoptosis was blocked by specific inhibitors of caspase (z-VAD-fmk) and caspase-3 (z-DEVD-fmk), respectively. Taken together, Cur-NPs triggered the apoptotic pathway in cisplatin-resistance human oral cancer cells. Our data suggest that Cur-NPs may be potentially efficacious in the treatment of cisplatin-resistance human oral cancer in the future.

A-20 Fredy Mardiyantoro[1], Nining D.S. Ismawati[2]

1. Resident of Oral and Maxillofacial Surgery, Faculty of Dentistry, Airlangga University, Surabaya, Indonesia.
2. Staff of Division Oral and Maxillofacial Surgery, Stomatology Instalation, DR.Soetomo General and Teaching Hospital, Surabaya, Indonesia

E-mail : fredy_stovit@yahoo.co.id

Mandible Reconstruction with Autogenous Costochondral and Iliac Crest Bone Graft After Resection of Ameloblastoma in Dr.Soetomo General and Teaching Hospital, Surabaya

Purpose: To evaluate the result of management of mandible ameloblastoma at Dr. Soetomo General hospital using non-vascularized bone grafts to reconstruct mandibular defects following tumor resection based on clinical outcome and radiographic features.

Method: Thirteen cases of mandible ameloblastoma treated with resection and immediate reconstruction by mean of autogenous non-vascularized costochondral or iliac bone grafts during 2007-2011 at Division of Oral and Maxillofacial Surgery, Department of Stomatology Dr. Soetomo