**Polymorphism analysis of candidate risk genes of pressure ulcers in Japanese elderly people: A case-control study at a long-term care hospital**

By Prof. Hiromi Sanada, Dr. Takeo Minematsu, Dr. Misako Dai

Master course, 2nd year, Toshihiro Tsukatani

Department of Wound Care Management,

Division of Health Sciences and Nursing,

Graduate School of Medicine,

The University of Tokyo

Background

Risk assessment of pressure ulcers (PUs) is the first step of their prevention, in which nurses play a key role. However, the recent studies reported the reduced specificities of assessment tools, which deteriorates a management efficiency of PUs. Therefore, the development of an efficient tool is required. I focused on the individual differences in skin tolerance against external forces. We hypothesized that the lower expressions or activities of skin tolerance-related genes due to their polymorphisms can promote PU development. This study aims to investigate the association of PU with polymorphisms of skin tolerance-related genes in elderly patients.

Method

This study is a case-control study in a long-term care hospital in Japan. The elderly patients with and without experience of PUs in a last half year are recruited to the case and control groups, respectively. The swabs of oral mucosa are individually collected for the polymorphism analysis of 8 genes. The association of the genotypes or alleles with PUs is evaluated by logistic regression analysis.

Status

The study protocol was approved by Research Ethics Committee of the Graduate School of Medicine, The University of Tokyo. I obtained informed consent from more than 230 elderly patients or their family.