A COHORT STUDY BETWEEN DIABETIC FOOT ULCERATION PATIENTS AND DIABETIC PATIENTS OF CHINA

Jiang Yufeng¹, Wang Xuemei², Fu Xiaobing²

¹Wound Healing Unit, the First Affiliated Hospital, the General Hospital of PLA (Beijing, China); ²The School of Public Health of Inner Mongolia Medical University (Hohhot, China); ³Institute of Basic Medical Sciences (Beijing, China).

Aim: To determine the clinical features and relevant risk factors of foot ulceration (FU) in a large cohort of DFU patients (DFUP) and diabetic patients (DP) in Grade III-A hospitals in China.

Method: DFUP (n=452) and DP (n=881) underwent foot screening, physical examination and laboratory test in eight hospitals. All were assessed at baseline for demographic information, medical and social history, peripheral neuropathy screening, periphery artery disease screening, assessment of nutritional status and blood glucose control. One year later, patients were followed up via questionnaire to determine the incidence of new FU. χ2 tests and Student’s t-tests were performed for categorical data. Cox’s proportional hazards regression analysis was used to determine the independent, relative risk of baseline variables for new FU.

Result: DFU is more susceptible to older (DFUP/DP, 63.3/55.8 years), female (1.87/1.25 times), living alone (6.6%/1.25%), rural area (28.7%/21.2%), smoking (46.2%/35.1%). New FU occurred in 98/641 patients who completed their 1-year questionnaire (15.3% average annual incidence among DP). These factors were independently related to FU risk: smoking 2.566 (1.146-5.744), nephrosis complication 4.318 (1.909-9.768), cerebrovascular comorbidity 2.274 (0.997-5.188), abnormal ankle reflexes 3.432 (2.019-7.364), past history of ulcer 4.052 (2.397-6.848).

Conclusion: More than 15% of hospitalization-based DP develop new FU each year. Quit smoking, discover and cure diabetic complication and comorbidity early, can reduce outcome of DFU.