

**Diabetic foot disease and reduction of major amputations in Italy: results of an Italian 5-year study (2001-2005).** R.Anichini, F. Lombardo°, A. DeBellis, C.Caravaggi\*,M. Maggini°. Diabetic Foot Unit Pistoia, °Istituto Superiore Sanità Roma, Diabetic Foot Unit Abbiategrasso Milano.

Until now in Italy clear data on the incidence of amputation rate in diabetic subjects compared to non diabetic subjects, as well as on the hospitalization rate for diabetic foot problems are not available. Moreover the amount of peripheral arterial disease and vascular procedures has not been well evaluated yet. In the present study we present accurate data on hospitalization for diabetic foot ulcers, gangrene, diabetes-related lower extremity amputations (DRLEAs) and non diabetes-related lower extremity amputations (non-DRLEAs) in Italy over a 5 -year period (2001-2005). Research design and Methods: the data base for this study was taken from Italian Register of DRG (ICD9-CM ed 2002), containing information regarding all hospital admissions for diabetic patients, including diabetic foot problems occurred during years 2001-2005. Results: From 2001 to 2005 in Italy the hospitalization rate (HR) (for all causes) for diabetes patients significantly increased from 9.2 (in 2001) (x 1000 inhabitants) to 10.24 (in 2005): in these years the prevalence of diabetes increased from 3.9 % in 2001 to 4.2 % (Italian National Health data base). The hospitalization rate of diabetic population; in years 2001 - 2005 hospitalization for ulcers increased by 42% from 22.2x1000 to 31.6; gangrene by 28% from 13 x 1000 to 16.7 and hospitalization for peripheral arterial occlusive disease by 27% from 42 X 1000 to 53.5. In the same period of time it was observed that, while minor amputations were increased from 4.8 to 6.7 (x 100000 inhabitants), major amputations seemed to show a linear trend to reduction from 3.7 to 3.5 .The ratio between DRLEAs and non-DRLEAs was in these years about 75%. Moreover, in 2001 the total number of vascular procedures was 4549 (2285 endovascular peripheral revascularization angioplasty and 2264 surgical procedures peripheral by-pass); in 2005 the total number of vascular procedures rose to 10325 with a significant increase of peripheral angioplasty (7735) in comparison with surgical procedures. Conclusions: In the study period in Italy the incidence rate of major DRLEAs was decreased. These results could be possibly due to implementation of Diabetic Foot Care occurred in Italy since 1999, notably the increasing amount of peripheral angioplasty provides support for the critical role of revascularization in diabetic foot disease and we expect this technique has become even more feasible in the last years.