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Heart

5.7 The Input of Home Telemonitoring for the Treatment of Chronic Heart Failure in Old People at High Risk

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Introduction. Chronic heart failure represents the first cause of hospitalization in old patients. We sought if, after hospitalization, home telemonitoring and educational programmes of patients and their relatives could improve the continuity of assistance, the compliance to the therapy and the outcome of old patients with chronic heart failure at high risk.

Methods. We enrolled 38 patients aged between 55 and 90 years (mean 73.7 ys, 25 males and 13 females) with a recent admission for heart failure, in III -IV functional class. The main aetiology was post-ischaemic (66%). Patients sent data (ECG, blood pressure, heart rate, weight, diuresis) and received instructions (drugs titolation, advices on style of life) via internet – with the telematic support of TeSAN network – with weekly contact for 6 months. Quality of life was measured by means of Minnesota Living with Heart Failure Questionnaire (MLHFQ). We additionally used audio-visual and paper instructive-educative material for home management of the symptoms and optimization of the therapy. We systematically involved the family and/or caregivers in the support of the patient with chronic heart failure, liable for periods of denial and/or minimizing of the disease, depression of mood and/or alteration of the state of mind, in order to over decrease the non-intention al non-adherence to the therapy.

Results. All patients completed the period of home telemonitoring with a punctual weekly telephone follow-up. We recorded a good adherence to the therapy and the drugs titolation was easy. Patients improved the ability of self-control and put to use the necessary changing of the style of life. At the beginning the mean MLHFQ was 54.8 (30-76, range 46), after 6 months became 21.3 (5-70, range 65), as an index of sensible improvement of the quality of life. Mean left ventricular ejection fraction (LVEF) at the beginning was 29.3%, after 6 months became 37.9%. After 6 months, 4 patients in IV functional class changed into II (17%), 2 into II-III (8%) and 18 remained stable in III (75%); 1 patient in IV functional class changed into II (7%), 6 into II-III (43%) and 7 into III (50%). The rate of mortality at 6 months was extremely low (5%) and the rate of hospitalizations too (26%).

Conclusions. The preliminary data of this ongoing study support the feasibility, efficacy and appropriateness of the patterns of informative-collaborative communication with psycho-social exchange and the interactivity of the patient considering remote telemonitoring for the management of chronic heart failure in the first months after hospitalization.