DRUG PRESCRIPTION AND FRAGILITY FRACTURES

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Despite the well-known morbidity and mortality associated with fragility fractures of the hip, the prescription of drugs to these patients is not yet clearly defined. A study was carried out to evaluate the typology and duration of antithrombotic prophylaxis and secondary prophylaxis of refractures as well as on survival and refractures in patients discharged from hospital after hip fractures. The data were collected by using the hospital discharge record (HDR) archive, the drug prescription archive in charge of the National Health System, and the archive of the drugs supplied on discharge from hospital. Bisphosphonates, calcium and its associations with vitamin D, raloxifene, and heparins were examined in the study. As regards prescription, the Defined Daily Doses (DDDs) method, that is, the correct dose for each drug, was used. Patients aged ≥ 50 years, hospitalized for hip fractures and discharged from 2000 to 2002 at the local health and social services (ULSS) no. 4 and no. 16 of the Veneto, were taken into consideration. The eligible population was of 1424 patients, excluding the subjects dropped at the follow-up and the deceased.

As to antithrombotic prophylaxis, it appeared that only 58% of the population underwent treatment, and survival was significantly higher in the treated subject than in the non-treated patients. Antithrombotic therapy had an independent and significant effect on mortality after adjustment for age and sex.

As regards antiosteoporotic prophylaxis, only 20% of the population turned out to be treated with antiosteoporotic drugs. Among the treated patients, on the basis of DDDS about 58% received a non-optimal therapy. In terms of percentage of hip refractures, it appeared that 3.5% of the treated patients and 3.3% of the non-treated patients experienced a second fracture. A thorough analysis revealed, however, that refractures occurred only in patients on non- or sub-optimal therapy.

To conclude, we were able to observe how prescription of drugs is definitely inadequate and how this affects the population’s health state. Efficient and purposeful health regional and national planning is therefore mandatory.