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DEALING WITH CO-MORBIDITY AND RARE COMPLICATIONS IN A DIABETES TYPE 2 COST OF ILLNESS STUDY

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OBJECTIVES: There is a general lack of data on the prevalence of diabetic complications, especially on co-morbidity. As part of a pan-European cost of illness study (CODE-2: Cost of Diabetes in Europe, Type 2) an epidemiological cross-sectional study has been conducted with practitioners in Germany prior to the main study in order to investigate the frequency of major complications (cardiovascular, cerebrovascular, nephrological, neuropathy, ophthalmological).
METHODS: A representative random sample of 138 physicians (GPs and specialists) documented the age and complications of 2701 randomly selected type II2 diabetic patients on the basis of medical files. Different complication schemes were grouped in five strata out of which 809 patients were randomly selected for a more detailed evaluation. Rare complications were over-represented and for estimation of event rates weighted by the prevalence data derived from the pre-study.
RESULTS: Absence of complications was found in 48.5% of the patients. Co-morbidity appeared in the majority of patients with complications (44%–89%, depending on the main complication). Overall incidence in the diabetes population was estimated to be 0.78% for myocardial infarction, 1.28% for stroke and 0.80% for amputations. Prevalence of blindness accounted for 1.34%. Due to the sampling strategy even rare complications like dialysis were sufficiently reported (three times the number expected in an unstratified random sample) to estimate an overall prevalence of 0.62%.
CONCLUSIONS: The study provides for the first time precise data on co-morbidity. The extrapolated event rates in diabetic patients showed a strong correspondence with published data where available. This method proved to be very effective for the extrapolation of epidemiological data by avoiding double counting. The method is also useful for improving quality of estimations in rare subgroups. In addition, it builds a reliable and precise basis for the estimation of cost on a population level.

ED4

QUALITY OF LIFE AND USE OF HEALTHCARE RESOURCES IN GROWTH HORMONE-DEFICIENT ADULTS AFTER GROWTH HORMONE REPLACEMENT THERAPY

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OBJECTIVES: Healthcare and indirect costs have been shown to be higher in hypopituitary adults with untreated growth hormone deficiency (GHD) than in the general population. The present study assessed the effect of growth hormone (GH) replacement therapy, in terms of quality of life (QoL) and use of healthcare resources, in GH-deficient patients included in KIMS (Pharmacia & Upjohn International Metabolic Database), which is a pharmacoepidemiological survey of adult patients with GHD.
METHODS: The number of visits to the doctor, number of days in hospital, amount of sick-leave, physical activity during leisure time and assistance required with normal daily activities were recorded at entry into KIMS and after 12 months of GH replacement.
RESULTS: Data were available from 2260 patients at baseline and from 1019 patients at 12 months. For the total group, there were significant ($p < 0.001$) decreases over 12 months in mean number of visits to the doctor (from 2.7 to 1.6) and mean number of days of sick-leave (from 6.5 to 3.5) The mean number of hospital days decreased from 0.92 to 0.59 ($p < 0.12$). Patients also reported significantly ($p < 0.001$) increased leisure-time physical activity. Naïve patients (not previously treated with GH) reported significantly ($p < 0.001$) greater improvements in physical activity over 12 months than non-naïve patients. Naïve patients needed significantly more assistance with normal daily activities than non-naïve patients at baseline (22% vs 15%; $p < 0.001$), but not after 12 months (16% vs 14%). Significantly ($p < 0.001$) more women required assistance in daily activities than men, both at baseline (28% vs 10%) and after 12 months (23% vs 7%).
CONCLUSIONS: GH replacement significantly reduces the use of healthcare resources and improves QoL in adults with GHD.