PRIMARY MEDICAL THERAPY OF ACROMEGALY WITH DOPAMINE AGONISTS: ANALYSIS OF THE GERMAN ACROMEGALY REGISTER

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Dopamine agonists (DA) represent an orally effective and comparably cheap therapy for acromegaly. So far, 1000 patients have been entered into the German Acromegaly Register. Initial random GH was 29.7+/-2.1 ng/ml, with 92.3% of GH>2.5 ng/ml and 96.1% of IGF-1 elevated. Radiological evaluation revealed micro- and macroadenomas in 21.2% and 63.6% of patients, respectively.

Sixty-seven patients received DA with the intention of primary medical treatment. Biochemical data after 6-18 months of continuous therapy was considered for re-evaluation, which was available for 24 patients (Bromocriptine 87.5%, Cabergoline 12.5%). Random GH <2.5 ng/ml were found in 17.4% of patients, and normal IGF-1 in 30.8%. GH and IGF-1 were 63.7+/-10.1% and 102.5+/-16.6% of initial values, respectively. Another 36 patients received DA prior to other forms of therapy, with biochemical data available for re-evaluation in 29 patients treated for 11.9+/-2.1 months (Bromocriptine 69.0%, Cabergoline 24.1%). In this subgroup, random GH<2.5 ng/ml was obtained in 17.2% of patients, and normal IGF-1 levels in 16.7%. GH and IGF-1 were 126.0+/-48.2% and 76.5+/-21.1% of initial values, respectively. Due the retrospective nature of the evaluation, the reasons for patient's assignment to either treatment group are difficult to elucidate. The slightly better response rate in the first group may be explained by the lower rate of macroadenomas (41.7% compared with 58.6%). Pre-treatment random GH did not differ significantly between both groups (15.7+/-3.2 ng/ml compared with 31.0+/-15.5 ng/ml).

In conclusion, primary medical treatment with DA is effective only in a small subgroup of patients with acromegaly. However, a treatment trial may still be cost-effective to identify patients, who specifically benefit from this orally available treatment. Prospective studies are necessary to identify criteria for patient selection and to evaluate a larger number of patients treated with second generation DA.