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SUMMARY

Neurotransmitter impairments in MDI can also affect hormonal neuroregulation. Therefore, we decided to study the integrated concentration of growth hormone (IC-GH) and its 24-h secretory profile in this pathology. Ten women with major depressive illness (MDI) (three premenopausal and seven postmenopausal) were evaluated. Samples were obtained every 30 min using a constant withdrawal pump. Growth hormone (GH) pulses were analyzed by Cluster System. Twenty-four IC-GH was evaluated as area under the curve (AUC) and the following results were found:
Depressed (D) = 429.15 + 367.9 vs. controls (C) = 1281.07 + 379.77 ($p < .008$); nocturnal IC-GH: D = 220 + 274.0 vs. C = 739.52 + 378.15 ($p < .02$). No statistically significant differences were found between D and C in diurnal IC-GH or in the number of nocturnal or diurnal pulses. Adrenal (cortisol at 0800h, 2300h and post-suppression 1 mg of dexamethasone) and thyroid (T3, T4 0800h and 1700h TSH) evaluations did not show statistically significant differences between D and C women. In conclusion, patients with MDI present a decrease in total GH secretion at the expense of the nocturnal period, probably due to changes in the neurotransmitters that would be involved in depression.

Keywords-Depression; Endogenous depression; Growth hormone; GH neurosecretory dysfunction; GH secretory profiles.