# LONG TERM FOLOW-UP OF PATIENTS WITH ADRENAL INCIDENTALOMAS AND SUBCLINICAL HYPERCORTISOLISM: A SINGLE CENTER EXPIRIENCE

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## Introduction:

It has been more than 70 years since the first adrenal incidentalomas (AI) were described. Most of these tumors are non-secreting, and are found in 4-7% of adult population. Patients with subclinical hypercortisolism (or autonomous cortisol secretion) (SH) are observed in 1-29% of patients with AIs. Evidence suggests that this condition may be associated with higher prevalence of diabetes, obesity, hypertension and osteoporosis.

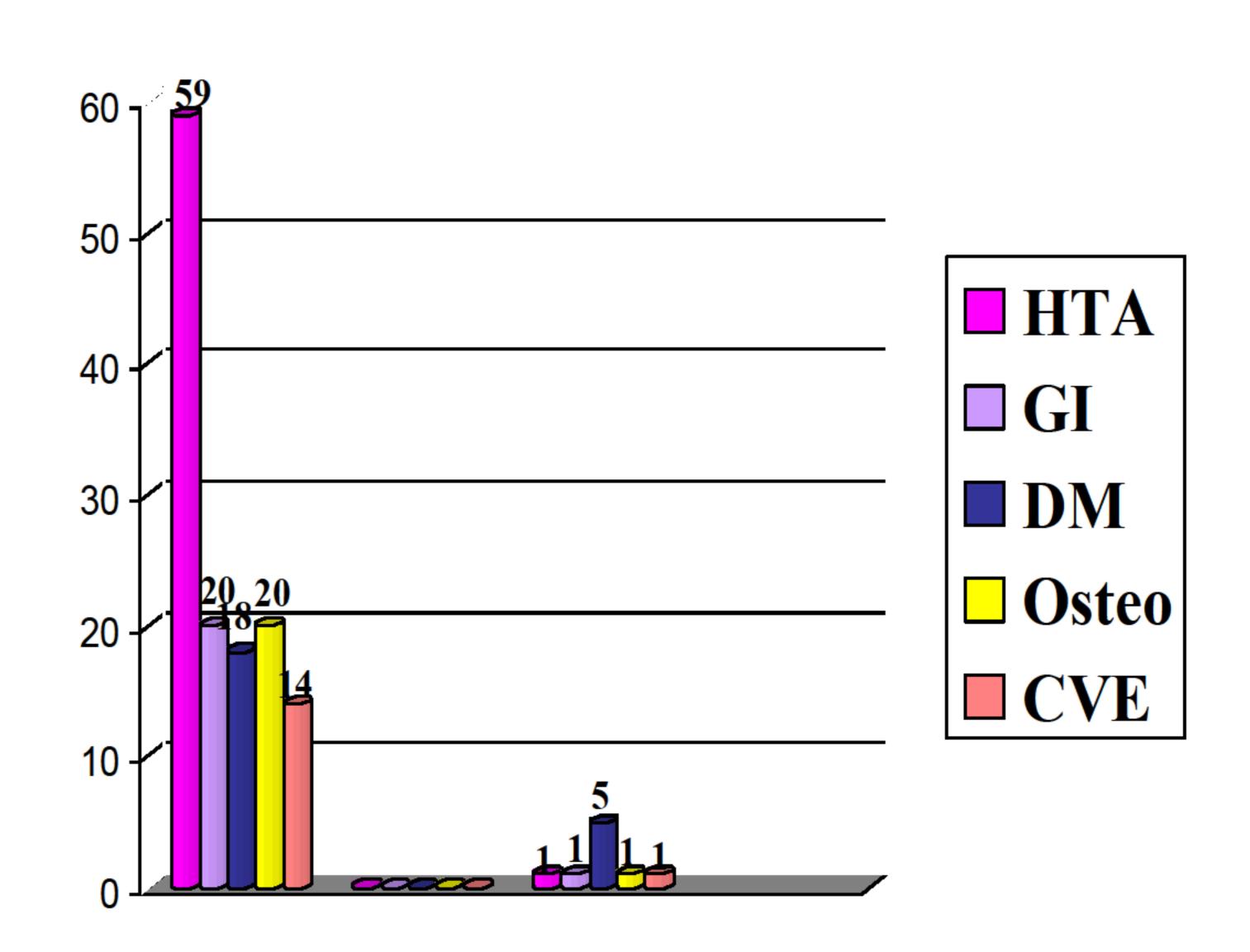
#### Patients:

Between 1999 and 2015, 857 patients with AI were evaluated. Seventy-two patients were diagnosed with SH based on two out of three criteria: 1mg overnight dexamethasone cortisol >83nmol/l, low basal ACTH (below 14ng/l) and lack of diurnal cortisol rhythm (midnight cortisol >150nmol/l). Fifty-nine women thirteen men, mean age 58.37±8.25 years and mean BMI 28.91±5.19 kg/m2. Thirtyseven (51.38%) patients had bilateral tumors and thirty-five (48.61%) had unilateral tumors, mean tumor size was 37.91±10.88mm and mean follow-up was  $5.02\pm2.98$  years.

At admission 59 patients (81.94%) had hypertension, 20(27.7%) had glucose intolerance, 18(25%) had diabetes and 20 (27.75%) had osteoporosis, 14 patients (19.44%) already suffered cardiovascular events (nine had myocardial infarction and one had a stroke).

## **Results:**

During the follow-up period one patient (1.38%) had a stroke, one (1.38%) developed diabetes, five (6.94%) developed glucose intolerance and one (1.38%) patient decreased bone mineral density to osteoporotic levels. Three patients underwent surgery due to tumor growth. Pathohistology showed cortical adenoma.



### **Conclusion**:

During the average follow-up of 5 years of seventy-two patients with SH and AI, 1.38% have had a new cardiovascular event, but nearly 7 % developed glucose intolerance which is important when deciding about the optimal management and follow-up strategies.



