

# Outcome with surgical treatment in subclinical hypercortisolism



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## Introduction

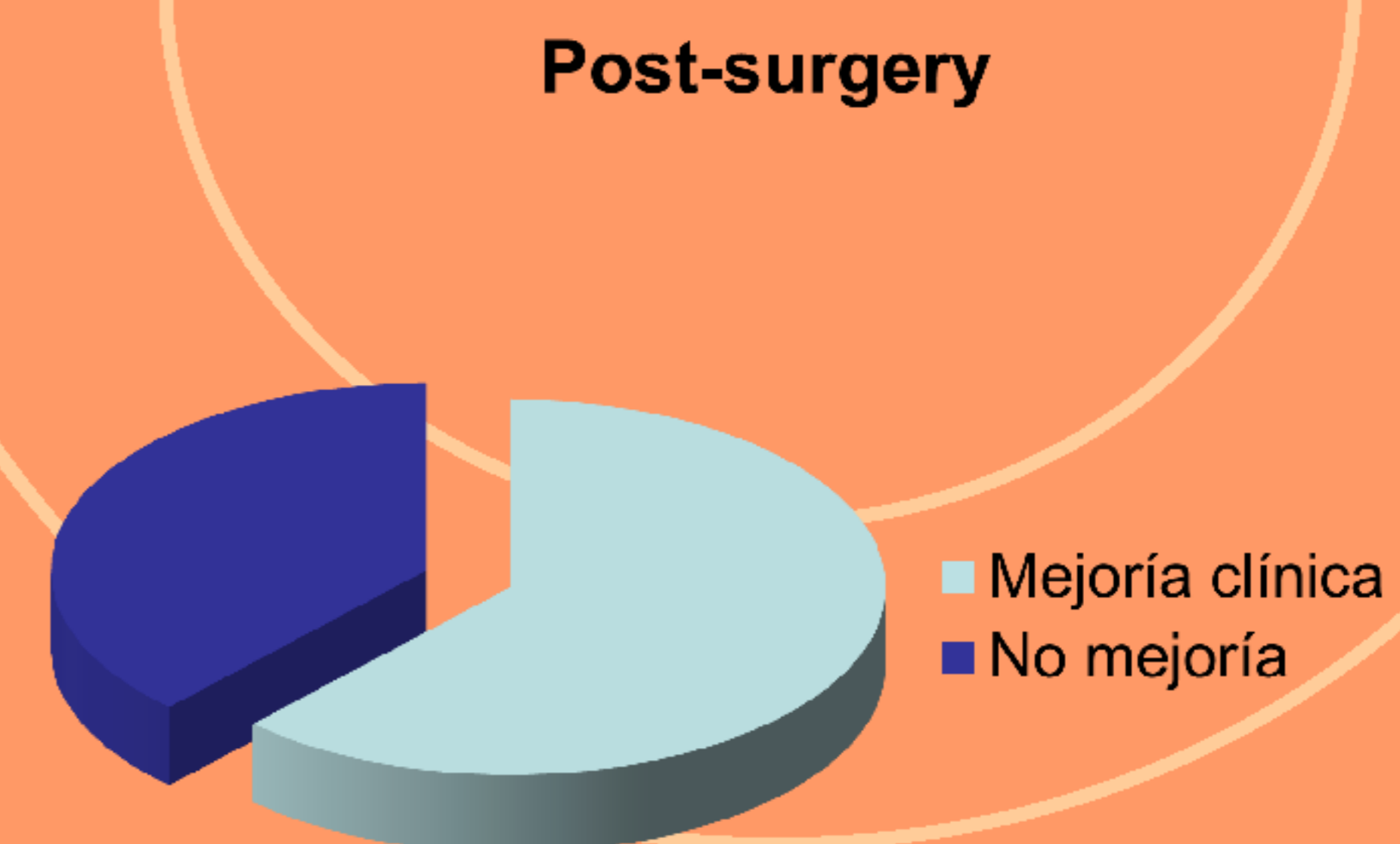
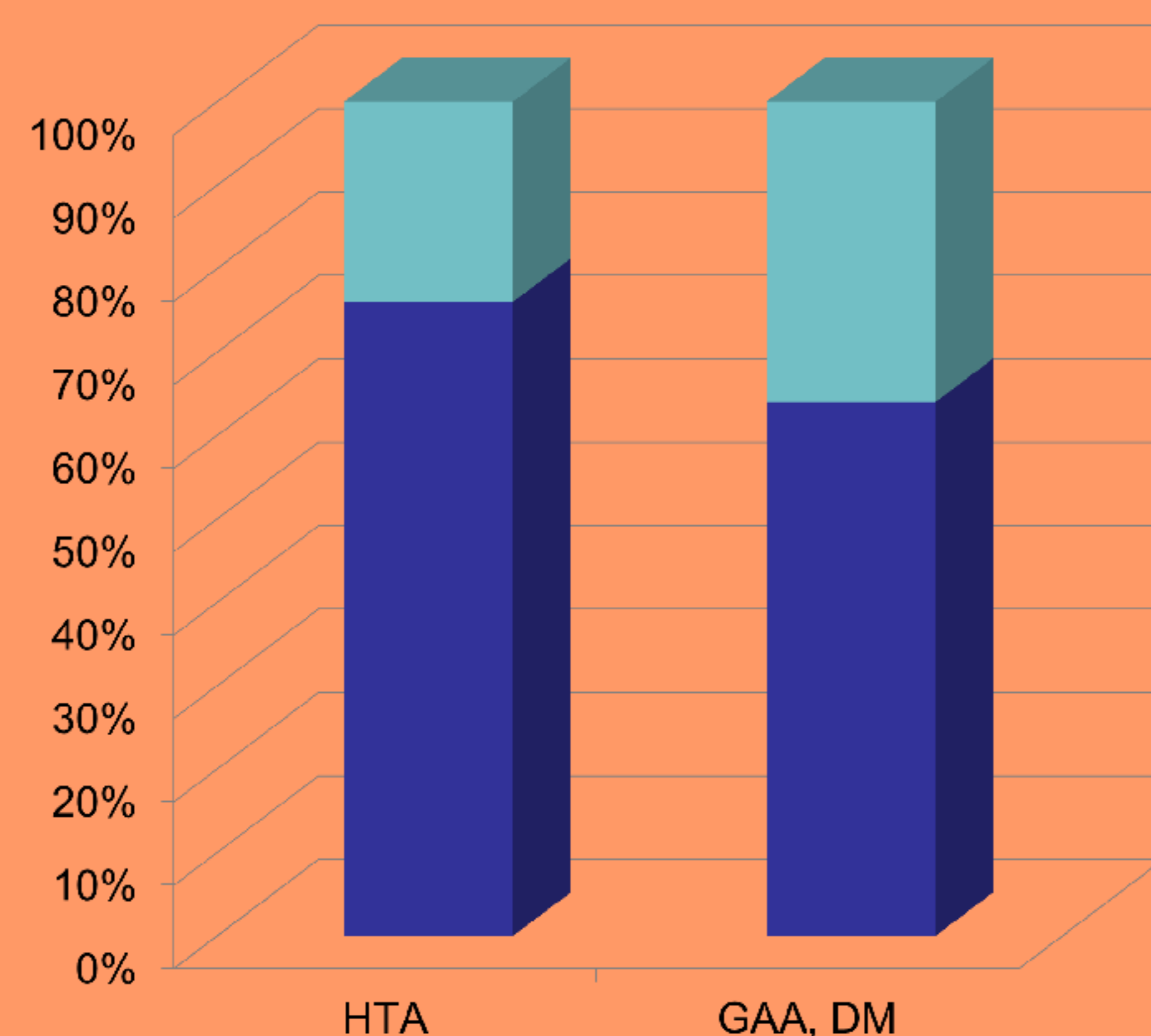
Subclinical hypercortisolism (SH), a condition of biochemical cortisol excess without the classical signs or symptoms of overt hypercortisolism, is thought to be present in the 5–30% of patients with incidentally discovered adrenal mass (adrenal incidentalomas). Some evidence suggest that this condition may lead to long-term consequences of cortisol excess, but indication and potential benefits of adrenalectomy in this state are still in doubt.

## Objectives

We analyse a series of patients with SH operated in our center to assess its clinical course after surgery.

## Methods

Retrospective study in 25 patients (19 women, 6 men) with an average age of 61,4 years (45-83) between 2001 and 2015. Indication for surgery was performed if they met at least 2 of the following criteria: urinary free cortisol (UFC) levels higher than 100 µg/24 h, serum cortisol levels after a 1-mg overnight dexamethasone suppression test (Nugent) >1,8 µg/dL, ACTH levels lower than 10 pg/mL and low serum DHEAS (for sex and age). Clinical and laboratory characteristics of the pre and postoperative state are collected.



## Results

The cause of diagnosis was mainly adrenal incidentaloma (84%). At diagnosis, 76% of patients had hypertension, and 64% GAA or DM. All patients but one had Nugent >1.8 mcg/dL. Adenomas were mostly left (76%), with an average size of 3.48 cm. Of the 21 patients with more than 1 year of postoperative follow-up, 62% experienced improvement in blood pressure values or carbohydrate metabolism. Postoperative replacement therapy with glucocorticoids was required in 60% of patients, with an average duration of 4.6 months (3-15). No preoperative biochemical, clinical or radiological parameter was associated with postoperative clinical response.

## Conclusions

In 60% of our cases adrenal surgery for subclinical hypercortisolism led to a marked improvement in glycemc control and/or hypertension. We found no biochemical parameter for predicting this favorable response.

