

Subclinical Cushing's syndrome: report of 17 cases

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Introduction

Subclinical Cushing's Syndrome refers to autonomous cortisol secretion in patients who don't have the typical signs and symptoms of hypercortisolism. This study was undertaken to describe clinical, biological and radiological features of this disease and to evaluate the clinical outcome after surgical and medical treatment.

Methods:

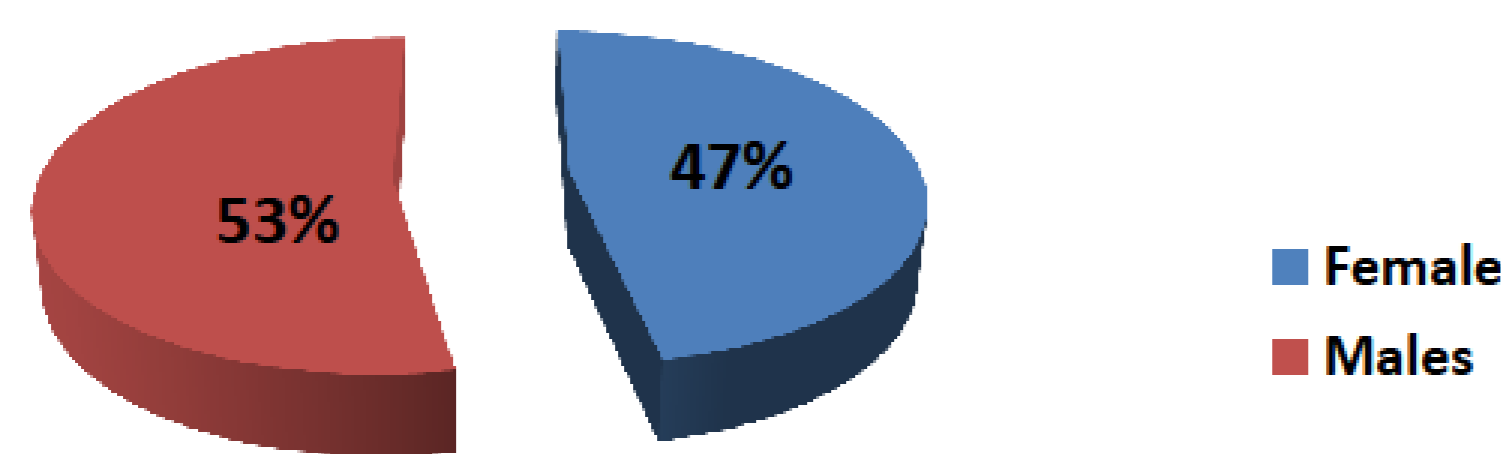
Retrospective study conducted over a period of 12 years and including 17 patients hospitalized in our department of endocrinology for subclinical Cushing's syndrome.

Results:

*Characteristics of patients

The mean age of our patients was 58.94 years (38-77)

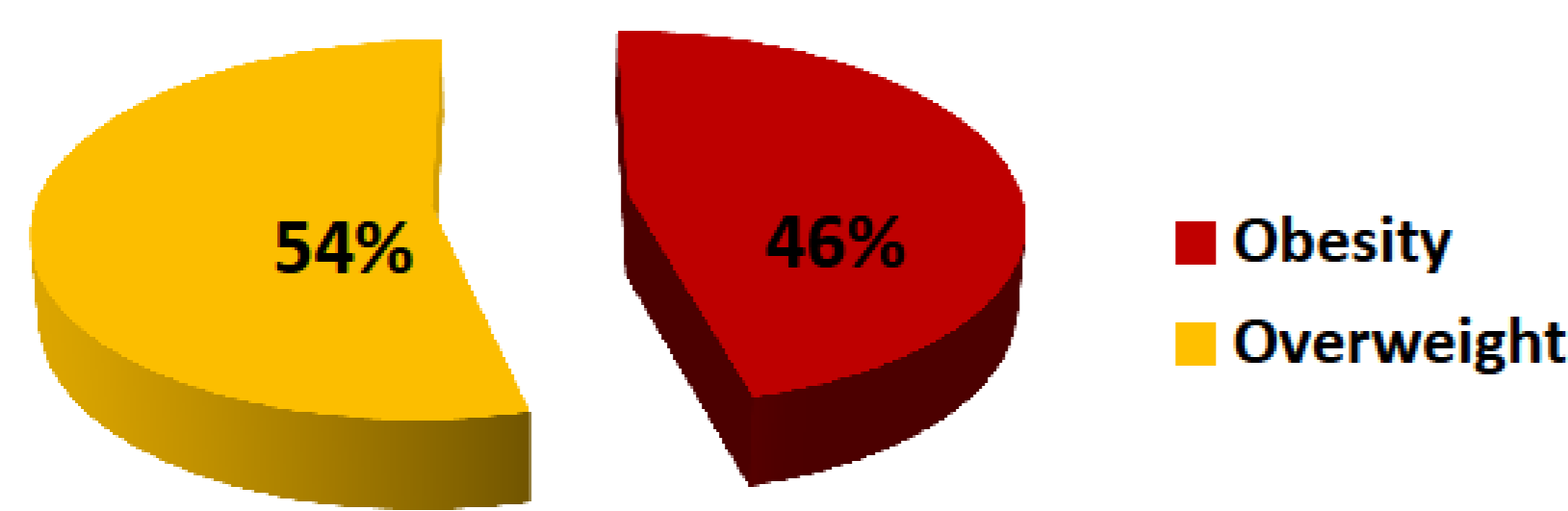
Sex:



-Anthropometric characteristics

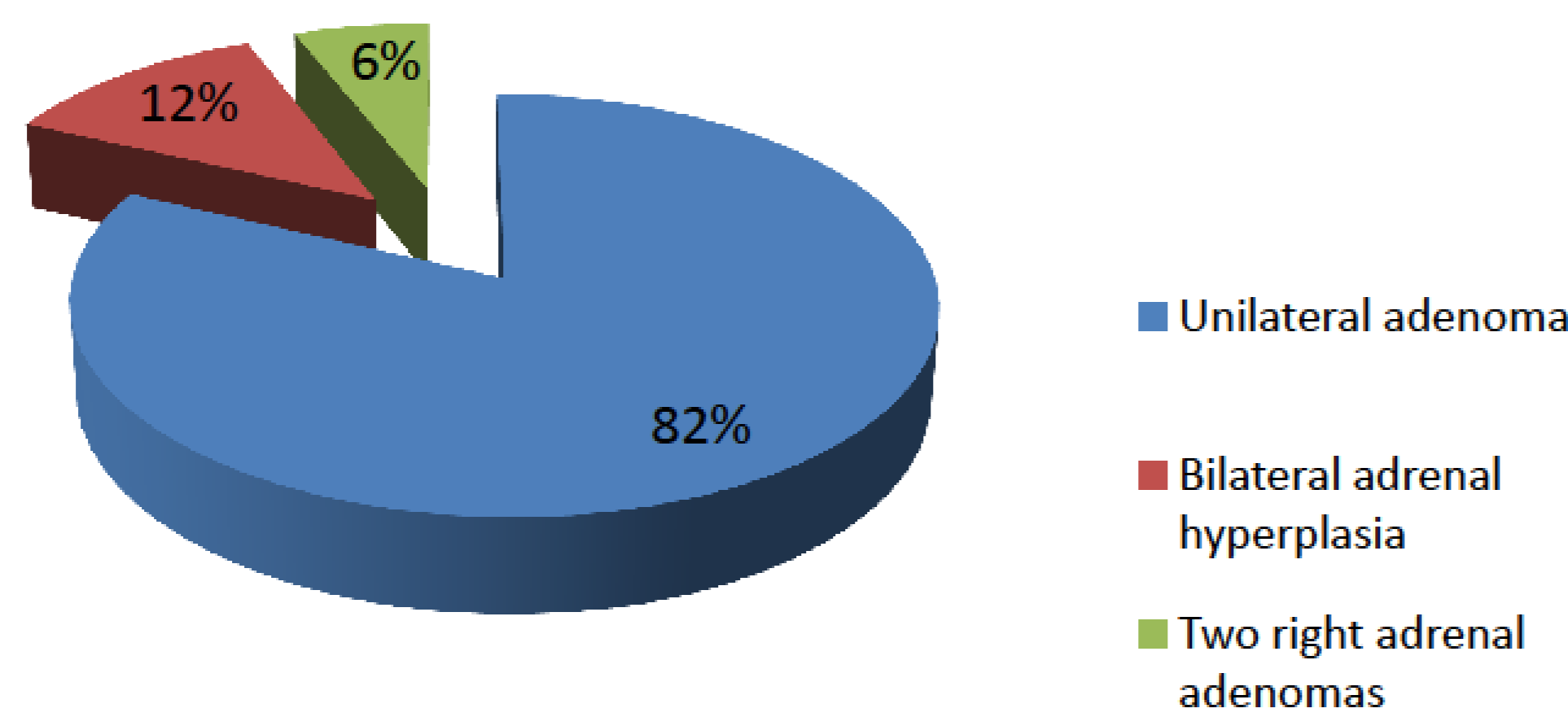
The average waist circumference: 99.05 cm (range: 80-134)

Body mass index:



*Confirmation of the diagnosis

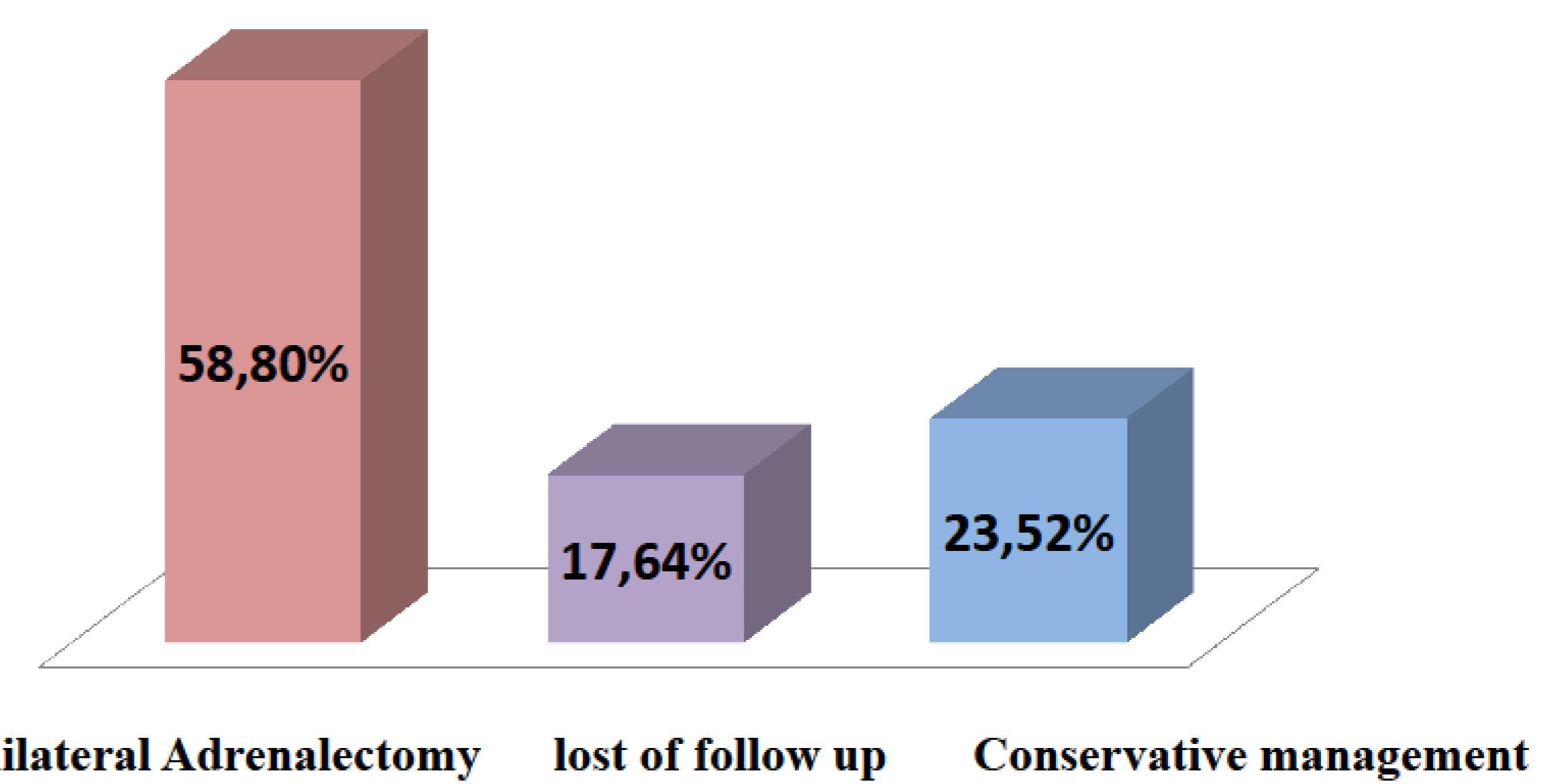
- Dexamethasone suppression test (2mg): altered response in 100% of cases
- Urinary free cortisol: dosed for 4 patients (23.5%)
was normal in 3 cases (75%) and high in 1 case (25%)
- ACTH: available for 15 patients (88.23%).
Mean level: 20.21 ng / l (10 to 39.7)
- Adrenal CT: was performed for all patients



*Repercussions of subclinical Cushing's syndrome

HTA: 47,05%
Dyslipidemia: 23,5%
Diabetes : 23,52% Impaired glucose tolerance: 29,41%
Metabolic syndrome: 41,17% Obesity: 46%
Hypokalemia: 11,7%

*Treatment:



*Evolution:

Surgically treated patients:

- 50% :adrenal insufficiency
- 100%:improvement of anthropometric parameters and regression dyslipidemia
- 33% :improvement in hypertension
- 28.57% :regression of diabetes

Patients with conservative management:

- 50%:aggravation of diabetes
- 50%:aggravation of dyslipidemia
- No one presented an evolution to a Cushing

Discussion

- ❖ The precushing syndrome is responsible for 20% of adrenal incidentalomas.
- ❖ Unlike Cushing's syndrome, precushing syndrome affects both sexes with a slight female predominance, in our series men were slightly more affected. The age of onset is generally in the fifth decade.
- ❖ The diagnosis of precushing is based on three criteria: the presence of an adrenal incidentaloma with cushingoid phenotype and autonomous secretion of cortisol with ACTH typically low.
- ❖ Patients have no specific signs of Cushing's syndrome but they may have a face erythrosis and one or more components of metabolic syndrome.
- ❖ Hormonally, the dexamethasone suppression test is often negative, the urinary free cortisol is usually normal which is consistent with our results. Cortisolemia at 23 h is usually normal and ACTH is often low.
- ❖ The treatment of a precushing syndrome differs with age. Beyond seventy years ,the conservative management is the rule. Before 50 years ,we opt for surgery. Otherwise, the surgery is recommended if precushing syndrome is complicated.
- ❖ Precushing syndrome rarely progresses to Cushing's syndrome. In our series none of the four non-operated patients has evolved to a Cushing's syndrome. The adrenal insufficiency can complicate adrenalectomy. 5 among the 10 operated patients had adrenal insufficiency.

Conclusion: Adrenal surgery appears to be beneficial in case of precushing's syndrome for both metabolic and cardiovascular complications.

Bibliographie:

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- 3-Biller BM et al, Treatment of adrenocorticotropin-dependent Cushing's syndrome: a consensus statement. J Clin Endocrinol Metab. 2008 Jul; 93(7):2454-62.

