



MACROPROLACTINOMAS INVASIVE AND ITS RESPONSE TO TREATMENT IN WOMEN. CALI - COLOMBIA. COHORT STUDY



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INTRODUCTION

Prolactin-producing tumors are the most common pituitary tumors, representing 40% of all tumors of this type, with an annual incidence of 6-10 cases per one million inhabitants. Less than 10% are macroprolactinomas, which vary with age and sex (1) and a female to male ratio of 10: 1, however, the less diagnosed in this population group. 30% associated with other endocrine tumors, this association taking a less predictable behavior and worse prognosis. (2)

Associated with hypogonadism, hyperprolactinemia induced which generates a negative feed back in the gonadotropic hormones (3-4) and its diagnosis is based on two aspects, hormonal and behavioral analysis of tumor size. To which were performed pharmacological interventions, with dopamine agonists, being cabergoline preferred, since it has a therapeutic efficacy improvement in the ability to reduce tumor size, greater half-life in its physiological effect, and less better tolerated dose (5); and surgical management, which is described after-sphenoid resection indicated when there is intolerance or pharmacological treatment when no adequate therapeutic response (6).

The goal of treatment is to reach a state of eugonadism and control tumor size, associated with the gradual reduction of serum prolactin. (7)

OBJECTIVES

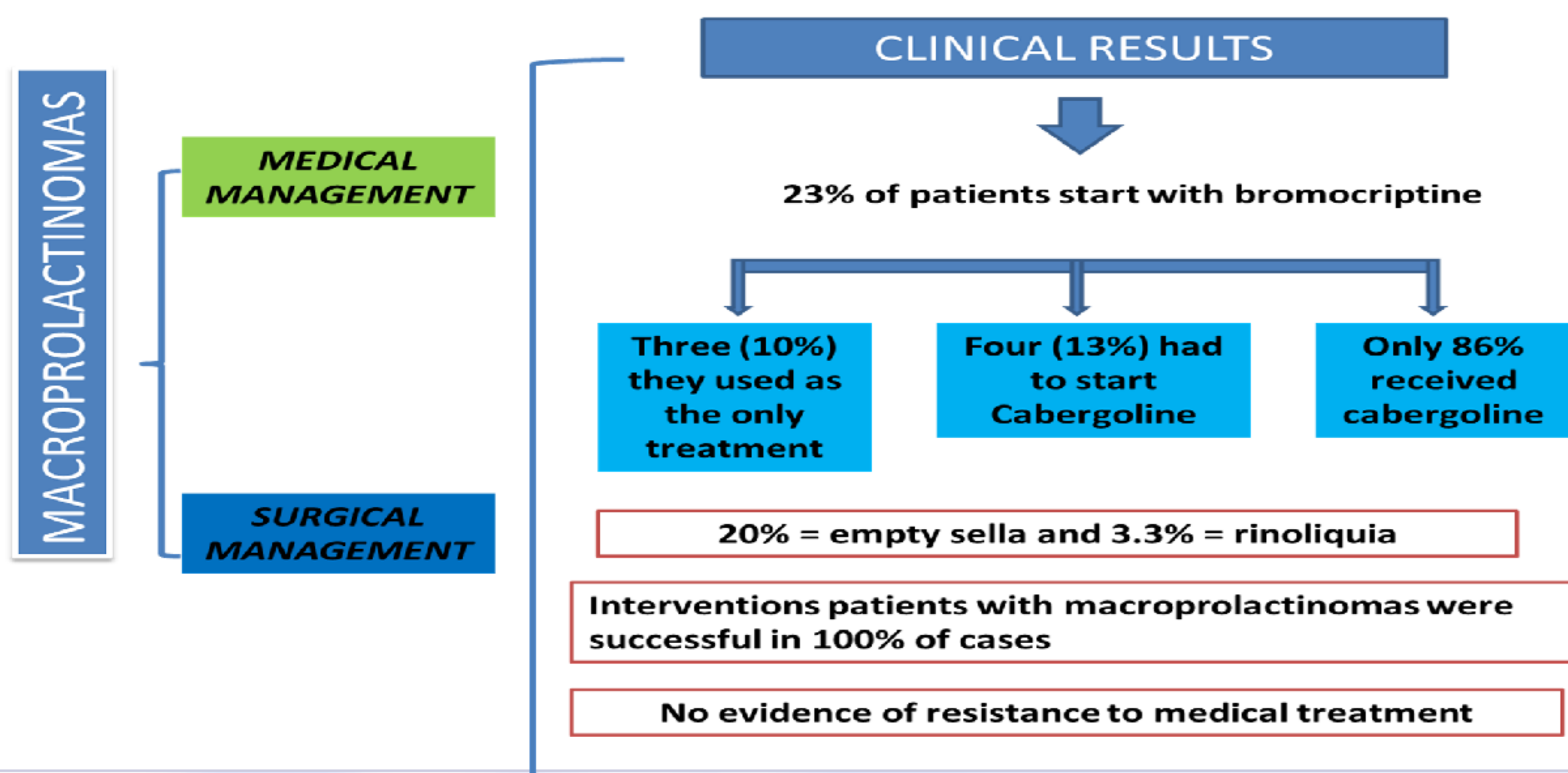
General:

Describe the characteristics and response to drug treatment of 30 female patients with invasive macroprolactinomas.

Specific:

1. Analyze the response to medical treatment with respects to control tumor growth through cerebral RMC.
2. Determine prolactin levels regarding the evolution over time and response to medical treatment.

REFERENCE THEORETICAL



CONCLUSIONS

Interventions in patients with macroprolactinomas were successful in 100% of cases; finding significant reduction in tumor size, according to the controls with respect to tracking imaging, clinical behavior and stable development during the monitoring and control, low incidence of complications such as fistula of cerebrospinal fluid, sella basin and no evidence of resistance to treatment doctor.

BIBLIOGRAFIA

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METHODOLOGY

Tracking a cohort of 30 patients, aged between 18-47 years, treated at the Clinic of Endocrinology Imbanaco Medical Center in Cali, Colombia, from 2002 to 2012 it was performed.

To analyze the demographic and clinical characteristics; signs and symptoms, initial hormone levels: prolactin, LH, FSH, estradiol, TSH, free T4, T3, surgery: after cranial and after spheroidal and complications: Cases with empty sella CSF leak.

Univariate analysis estimated proportions and measures of central tendency was performed according to the nature of the variable.

The success of therapeutic interventions was defined as a decrease over time in the size of macroprolactinomas, assessed by nuclear magnetic resonance and decreased serum prolactin levels measured at three points relative to baseline.

In the analysis given parametric tests Kosmogorov Smirnov test were used. For comparison of serum prolactin levels and tumor size statistic F Fisher Snedecor he applied. The relationship between tumor size and hormone patient admission values were established through the Pearson correlation coefficient.

ETHICAL CONSIDERATIONS

The research will be governed according to the provisions of resolution 8430 of 1993, the Ministry of Health in Colombia. Was counted with the informed consent of participants, regarded as lower risk to a minimum.

RESULTADOS

Demographic	n	Rank	Min	Máx	Mean
Age diagnosis	30	29	18	47	35
Weight (kg)	30	40	56	96	79
Size (CMS)	30	21	153	178	169
IMC	30	11	22	33	28

Signs and symptoms	n	Rank	Min	Máx	Mean
Evolution time in months	30	13	1	14	5
TAS	30	58	90	148	119
TAD	30	30	60	90	77

Categoría	n	%
Headache	29	96,7
Menstrual disorders	27	90
Pituitarismo hiccups	24	80
Visual impairment	23	76,7
Tumor-related	22	73,3
Decreased libido	22	73,3
Galactorrea	21	70
Asthenia	21	70
Absence of menstrual	20	66,7
Infertility	18	60
Partial hypogonadism	16	53,3
Monocular blindness	9	30
Total hypogonadism	8	26,7
Secondary amenorrhea	7	23,3
Subclinical stroke	6	20
Primary amenorrhea	3	10
Diabetes insipidus	3	10
Diabetes insipidus perm	3	10
Pituitary dysfunction	3	10
Stroke clinic	2	6,7
Oligomenorrhoea	0	0
Bilateral amaurosis	0	0

POPULATION OF 30 WOMEN WITH INVASIVE MACROPROLACTINOMAS
With an average age of 35 years
Average weight of 79 Kg
Average height 160 cm
BMI 28

Therapeutic interventions	n	Rank	Min	Máx	Mean
BRC dose	7	8	3	10	7
BRC time (months)	7	35	5	40	21
Caberg dose	27	5	2	7	3
Caberg time (months)	27	71	12	83	29

Category	n	%
Ag dopamine	30	100
Trasfenoidal surgery	13	43,3
Tras craneana surgery	5	16,7

- The most common interventions used and frontline according to international guidelines for the management of hyperprolactinemia and prolactin-producing pituitary tumors are DA, which were used in the entire population.
- No reported cases of resistance to DA
- With trans sphenoidal surgical requirements by 43% as first choice therapy for tumor size and the acute symptoms
- Trans cranial by the localization of the tumor in 16%

Complications	n	%
Empty sella	6	20
Rino LCR	1	3,3

- Very low rate of complications, among which are empty sella back to the use of DA

- Rinoliquia just a case of representation, post use of medications, non-surgical, which is self-limited

