

POLYCYSTIC OVARY SYNDROME AND HYPERPROLACTINEMIA

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INTRODUCTION

Polycystic ovary syndrome (PCOS) is a common endocrinopathy affecting 6–10% of reproductive aged women. This syndrome is associated with obesity, menstrual irregularity, infertility, hirsutism and insulin resistance. It has been reported that PCOS is frequently associated with hyperprolactinemia with ranges from 17 to 50%. So for many researchers the difficulty is to differentiate between real PCOS associated with hyperprolactinemia or hyperprolactinemia with PCOS aspect (chronic anovulation and polycystic ovaries) .

OBJECTIVE

This study aims to identify the cause of hyperprolactinemia in patients with PCOS.

MATERIALS

A prospective study was performed between 2010 to 2015 on 100 PCOS .The consensus of Rotterdam [1] was used to make the diagnosis of PCOS . All patients were screened for clinical exam , anovulation , FSH , LH, E2 , testosterone , SDHEA prolactinemia ,TSH ,17OHP , hypophysis MRI (if hyperprolactinemia) and pelvic ultrasound. The hyperprolactinemic patients were first treated with dopaminergic agonist.

RESULTS

The mean BMI was 27.52 +/-7.23 kg/m² and the mean age 24.5+/- 6.45 years. The mean prolactinemia was 65 ng/ml +/-5.6 (N < 30 ng/ml) .Twelve (n=12) of our patients had hyperprolactinemia (12%). Among them 9 (75%) had micro-prolactinoma , one used neuroleptics and 2 were idiopathic (as no causes was found).None of them had macroprolactinemia. The mean length of the menstrual cycle was 198 days in the hyperprolactinemic women. All of them were treated with dopaminergic agonist without improvement of the symptomatology even when the prolactinemia was in normal range. Then we begun the PCOS treatment.

DISCUSSION

Many researchers associate PCOS with hyperprolactinemia. A number of literature reviews show this association, with ranges from 17 to 50% [2], 17 to 43% [3], and 3 to 67% [4]. In our study hyperprolactinemia is less frequent (12 %) in PCOS women . Our results showed that patients with a clinical history compatible with PCOS and with high PRL levels must be investigated for other causes of hyperprolactinemia, such as pituitary tumor, use of medications, or macroprolactinemia ; before concluding at PCOS. In fact as hyperprolactinemia presents with the same characteristic of PCOS , the Rotterdam consensus suggest to eliminate hyperprolactinemia before the definitive diagnosis of PCOS [1] .In all cases the diagnosis of hyperprolactinemia was made and the etiology was found except for the two idiopathic one. For all his cases Filho found an etiology [5] . Kostrzak found a lenght of menstrual cycle (270 days) greater than our (198 days) perhaps because in our study prolactinemia was less higher [6] .In order to distinguish PCOS with hyperprolactinemia from hyperprolactinemia with PCOS aspect ,agonist dopaminergic were used. The absence of improvement confirm the fact that PCOS and hyperprolactinemia are distinct . In fact patients with PCOS do not respond to bromocriptine treatment because they do not have alterations in hypothalamic dopamine secretion [7] .

CONCLUSION

Our data show the importance and necessity of systematic investigation on the origin of hyperprolactinemia in women with chronic anovulation in order to distinguish it from PCOS. In all of the women with a history compatible with PCOS and with hyperprolactinemia ,a well defined cause for the high PRL level was identified :tumors , medication..... It 's important to make a systematic investigation on the origin of hyperprolactinemia in women with chronic anovulation in order to distinguish it from PCOS. In quite all of our patient a well-defined cause for the high PRL level was identified.

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