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EVALUATION OF PROLACTIN TEST ORDERING PRACTICES

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Introduction

Hyperprolactinemia can be caused by physiological changes, medications, pathological conditions, or can be idiopathic.

Aim: The aim of this study was to evaluate clinicians' practice in ordering prolactin (PRL) tests.

Methods

- A retrospective study during January 2024
- Seventy five (75) prolactin requests
- Data were collected by the laboratory computer system (Health Lab)
- We collected age, sex and ordering origins
- Cortisol tests were performed based on electrochemiluminescence immunoassay (eCLIA) by Dxi600® Beckman Coulter
- Hyperprolactinemia was defined by PRL levels above 25ng/ml and 15 ng/ml respectively for women and for men.

Results

- Mean Age : 37 (13-85) years
- Sex- ratio (M/F) : de 0,3
- Requesting departments : PRL requests were from the endocrinology department (58.7%), followed by the gynecology department (18.7%) and the psychiatry department (13.3%)
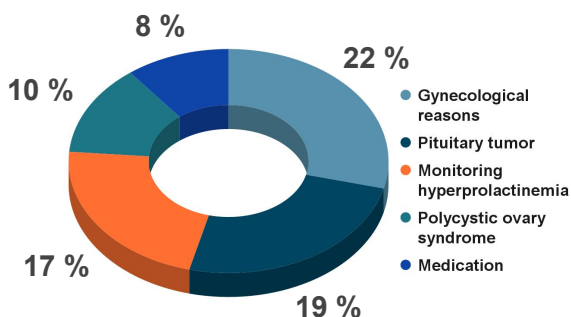- Reasons for prescribing a PRL test : (Fig 1)

8 %
22 %
10 %
17 %
19 %

- Gynecological reasons
- Pituitary tumor
- Monitoring hyperprolactinemia
- Polycystic ovary syndrome
- Medication

Fig. 1: Indications for Prescribing a PRL Test

⇒ **37.3% of the requests were without clinical indications**

- **Mean PRL level :** 27 (1,8-196,15) years

⇒ Among requests with clinical indications of having hyperprolactinemia and requests without clinical indications, only 29.4%, and 28.6% had respectively hyperprolactinemia.

Discussion

In our study, the early age of onset of hyperprolactinemia is related to the underlying etiology, which is consistent with the literature. [1]
However, our results showed lower etiology-related rates compared to various studies, which may be attributed to the small sample size and the retrospective nature of our study. [2,3,4]

Conclusion

There was an over-ordering for prolactin in our hospital practice. Further evaluation is needed to determine strategies that can reduce excessive prolactin testing.

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