Aim of study:
To analyze the MRI findings of pituitary gland in patients with hyperprolactinemia and establish guidelines for a minimal serum prolactin level for which pituitary MRI imaging is indicated.

Methods:
A descriptive study was conducted at Al-Shaheed Ghazi Hospital and Radiology Institute from 1st of January to 30th of August 2015. Sixty patients with hyperprolactinemia underwent magnetic resonance imaging of brain for pituitary gland.

Results:
The results were based on the analysis of pituitary MRI findings for 60 patients, almost half of the sample were diagnosed as normal (46.7%), 18 (30%) as pituitary adenoma with macro adenoma being the smallest part (5% only). Pituitary hyperplasia accounted for 9 (15%) and empty sella for 5 (8.3%). There was a significant statistically association between serum PRL and pituitary adenoma. The optimum cut-off value for serum PRL for any positive pituitary findings (adenoma, hyperplasia and empty sella) was 55.1 ng/mL. While the optimum cut-off value of serum PRL for pituitary adenoma (micro/macro) was 102.5 ng/mL.

Conclusion:
MRI of the pituitary gland was significantly associated with serum PRL levels in patients with hyperprolactinemia. The optimum cut-off value of serum prolactin to predict pituitary adenoma (micro/macro) was 102.5 ng/mL. Therefore, pituitary imaging should be obtained for all patients with serum PRL (equal or higher than this value) after exclusion of any secondary causes of hyperprolactinemia.