



ENDOGENOUS CUSHING'S SYNDROME: The Filipino Clinical Experience Of 19 Cases

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BACKGROUND AND SIGNIFICANCE

- Cushing's Syndrome → Excessive Steroid Level
- Exogenous steroid intake → Most common cause
- Endogenous causes of Cushing's Syndrome is rare with an incidence of approximately 13 cases per million population.
- In Asia, and specifically in the Philippines incidence is unknown.
- Clinical presentation among Filipinos is not well described.
- The local epidemiology of obesity, diabetes and hypertension are different from other countries.
- Due to its rarity, it is difficult to rapidly assess and diagnose such patients.
- This description and collection of cases adds to the clinical knowledge and provides Filipino physicians clues in recognizing possible cases for screening.

Table 1: Baseline Characteristics of Endogenous Cushing's Syndrome

Baseline Characteristics	Endogenous Cushing's (n=19)	Pituitary (n=8)	Adrenal (n=7)	Ectopic (n=4)
Age	30 ± 10	24.6 ± 2.3	34.4 ± 11.7	31.5 ± 14.5
Female Percentage	89.5%	87.5%	100%	75%
Disease Duration (yr)	2.3 ± 3	3.6 ± 3.6	1.6 ± 2.4	0.83 ± 0.81
Hypertension	84.2%	75%	85.7%	100%
Diabetes	26.3%	25%	28.6%	25%
Mortalities	21.1%	0%	14.3%	75%

Figure 1: Biochemical Features Among Different Sources of Endogenous Cushing's Syndrome

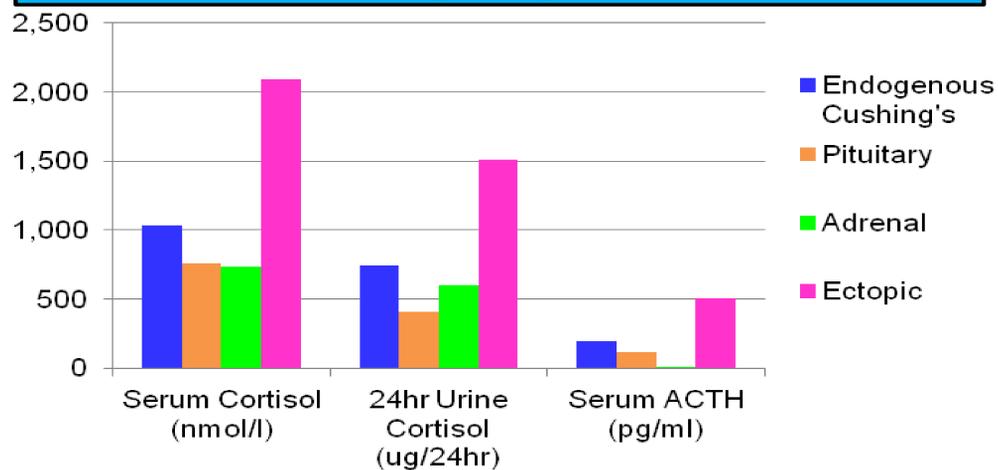
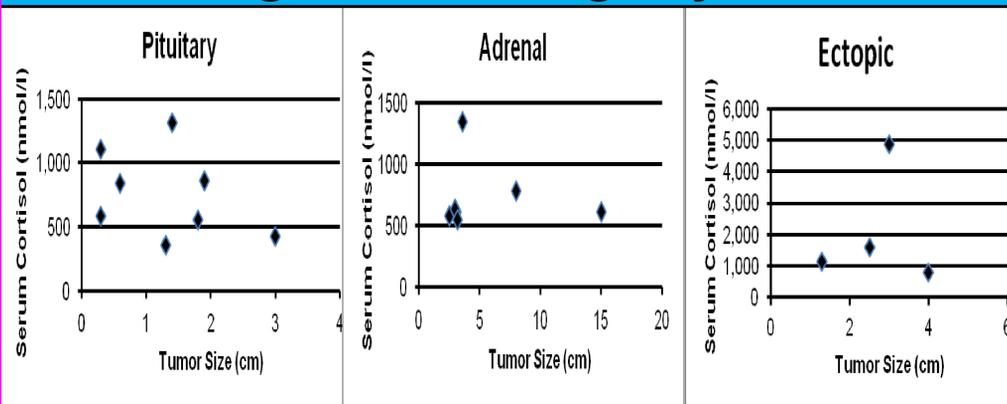
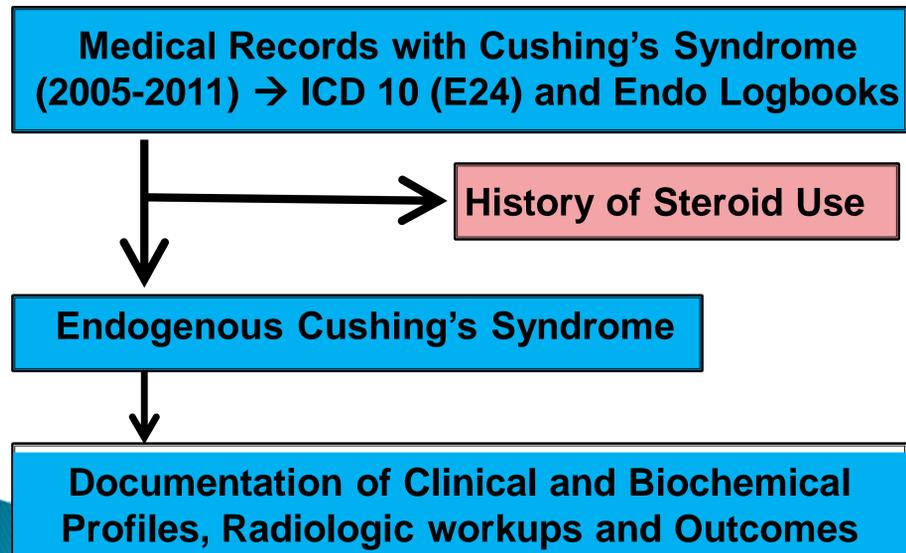


Figure 2: Correlation of Tumor Size and Serum Cortisol Among Different Sources of Endogenous Cushing's Syndrome



METHODOLOGY



RESULTS

- N = 19 cases (8 pituitary adenoma, 7 adrenal adenoma, 4 ectopic adenoma)
- Female predominance was noted (Table 1).
- Weight Gain – Most common symptom
- Moon Facies – Most common sign
- Ectopic sources → Short clinical course, hyperpigmentation, ecchymoses, behavioural changes and severe hypokalemia
- All cases had significantly elevated midnight serum cortisol level and 24 hour urine cortisol with ectopic sources exhibiting the highest level (Figure 1).
- There was no observed correlation between the tumour size and level of serum cortisol in all types (Figure 2).
- Majority underwent tumour resection leading to complete reversal of steroid excess.

CONCLUSION

- Adrenal, pituitary and ectopic foci are the main sources of endogenous steroid excess.
- Ectopic ACTH syndrome manifests differently with other causes providing clues that might help in rapid clinical differentiation.
- Imaging studies should only be used to confirm tumour location after rigorous biochemical tests.
- Surgical management remains to be the definitive cure for most of the cases, hence prompt diagnosis and localization is necessary.