**Clinical and pathological characteristics of hypertensive and normotensive adrenal pheochromocytomas**

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**METHODS**

- Phaeochromocytomas/Pheochromocytoma (Pheo/Pheo) present with an extremely variable clinical picture which ranges from dramatic, to mild, to silent, depending on tumor type and size. Hypertension is the hallmark of most phaeochromocytomas, but is not always present.
- Distinct differences of clinical manifestations exist in hypertensive phaeochromocytomas (HP) and normotensive phaeochromocytomas (NP).
- With the progress of imaging technology, an increasing number of asymptomatic phaeochromocytomas were gradually acknowledged, and more than 25 percent of phaeochromocytomas were accidentally discovered.
- The object was to assess the clinical symptoms, hemodynamics, metabolism, radiological and histological features of patients with HP and NP.

**CONCLUSIONS**

This study analyzed differences in HP and NP from clinical manifestations to molecular level, and suggested that HP and NP have distinct differences in clinical, biochemical, pathological and molecular phenotypes, which are closely related with the carcinogenic pathway involved in tumour occurrence and development. Additionally, the change of quantity and phenotype of carcinogenic factors has been blamed to the cause of biochemical and pathological phenotypes change.

**RESULTS**

- Table 1: The overall clinical characteristics of HP, NP and PH groups. The study was approved by the Institutional Review Board of Drum Tower Hospital Affiliated to Nanjing University Medical School.

**REFERENCES**


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**Context and Objectives**

- Patients with NP showed lower proportions of clinical trials, inarguable morbidity and lower urinary catecholamine levels than HP, but higher than PH.
- Tumor weight positively correlated with 24h urinary norepinephrine level in patients with HP (P=0.028), and tumor diameter negatively correlated with Phenylethanolamine-N-methyltransferase (PNMT) immunohistochemistry (P=0.011) in NP but not in HP.
- The Adrenal Gland Scale Score of NP group was similar to that of HP group. The transcript gene levels of PNMT, Secretogranin II (SGII) and Neuropeptide Y (NPY) from tissue samples were significantly lower in NP than in HP, while Vesicular amine transporter 1 (VMAT1) had no difference between HP and NP.
- The Ki 67 (%: HP vs. NP) was 17/41/6 (P=0.011) in HP but not in NP.
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**RESULTS**

- Table 2: The overall clinical characteristics of HP, NP and PH groups. The study was approved by the Institutional Review Board of Drum Tower Hospital Affiliated to Nanjing University Medical School.

**References**