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**Epidemiology and** Prevention

# The underlying pathology of primary hyperparathyroidism; a summary on 87 published cases in Thailand



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rimary hyperparathyroidism (PHPT) is an important abnormality of parathyroid gland. The PHPT is rare and sporadically reported (1,2). The patient with PHPT might have the abnormal mineral metabolism and might have osteoarticular, digestive or renal problems (1,2). In countries where there is a limited availability of biochemical screening tests, PHPT is usually diagnosed late (3).

In Thailand, a tropical Asian country, PHPT is also reported. In this short study, the authors summarized the data on the pathological findings underlying the PHPT among Thailand patients. The literature searching was done using standard reference international (PubMed) and local database (Thai Index Medicus). From literature searching, there are at least 87 published case reports of PHPT in three publications (4-7). The surgical pathological findings are single solitary adenoma in 80.5% (n = 70), parathyroid hyperplasia 8% (n = 7), and parathyroid carcinoma 11.5 % (n = 10). Focusing on the 7 cases with parathyroid hyperplasia, there are five cases with four-gland hyperplasia, one case with two-gland hyperplasia and one case with one - gland hyperplasia. Of interest, as known, this report contains the highest number of included cases of PHPT in tropical Asia. This epidemiological data showed that most of PHPT cases in Thailand are due to single solitary adenoma. This finding is similar to the findings in previous reports from other settings (8,9). Nevertheless, the observed rate of malignancy in this report is lower than that seen in Western countries (about 5.9% (8). The high incidence rate of cancer in this report confirms the requirement of the early parathyroidectomy for management of PHPT. As concluded by Bilezikian et al, PHPT "can be cured by

#### Authors' contribution

SY and VW wrote the manuscript equally.

removal of the parathyroid gland or glands" (3).

#### **Conflicts of interest**

The authors declare no conflicting interest.

## ■ Implication for health policy/practice/research/ medical education

Primary hyperparathyroidism (PHPT) is an important abnormality of parathyroid gland. PHPT is usually diagnosed

**Keywords:** Primary hyperparathyroidism, parathyroid gland, parathyroid hyperplasia

#### **Ethical considerations**

Ethical issues (including plagiarism, data fabrication, double publication) have been completely observed by the authors.

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