Rare neuroendocrine tumor secreting vasoactive intestinal peptide with multiple endocrine neoplasia 1: Case report

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Aim: Neuroendocrine tumor secreting Vasoactive Intestinal Polypeptide (VIPoma) is rare endocrine tumor.

Method: Genomic DNA was extracted from blood leukocyte of the patient using Qiagen's blood DNA extraction kit. Genotyping was performed using Polymerase Chain Reaction (PCR)-direct nucleotide sequencing method.

Result: We report case of neuroendocrine tumor secretes vasoactive intestinal polypeptide (VIP) in a 42-year-old Thai female who presented with chronic watery diarrhea and hypokalemic metabolic acidosis for 1 year. The stool was watery, yellow color, non-bloody with volume of about 300 ml each time. Blood for vasoactive intestinal polypeptide level was 360 pg/mL (normal<75). The computed tomography revealed mass at uncinate process of pancreatic head in parallel with increased tracer uptake at same are by octreotide scan. The study detected two variants, the c541 variant has been reported as a genetic polymorphism by Marini F 2008, the most likely disease-causing mutation was Cys409STOP (Cysteine was substituted by stop codon). Intraoperative finding was presented a 3.5-centimeters light tan round mass at the head of pancreas. Finally, this case went on operation with pyloric preserving pancreateoduodenectomy. During post-operative period, the patient had no serious complication.

Conclusion: Multiple Endocrine Neoplasia type 1 (MEN1) is rare genetic disorders of multiple endocrine tumors that encoded by MEN1 gene in human. Even though majority of MEN1 are benign and produce endocrine hormones but some are aggressive and presenting with metastatic tumors such as VIPoma. Surgical resection is gold standard treatment of neuroendocrine tumor. Further studies in parents and siblings are suggested.

Biography
Anusornvongchai Thitinun has completed her M.D in Internal Medicine from Chulalongkorn University of Thailand. She is trained in Endocrinology from Department of Medical Service, Thailand. She is currently working as an Endocrinologist in Lerdsin Hospital and is also a Clinical Doctor. She studied about ER stress and saturated fatty acid in Tokyo, Japan. She is also a Committee Member of Diabetes Association of Thailand.

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