



Simultaneous Tubulovillous Adenoma with Focal Adenocarcinoma and Neuroendocrine Tumor in Ampulla of Vater: Report of One Case

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Case Report

A 56 year-old male with medical control for diabetes for years, was referred to our hospital due to abdominal discomfort accompanied with body weight loss 10 kg within 6 months. The gastroscopy demonstrated a tumor in Ampulla of Vater (Figure 1). The abdominal CT and MRI revealed a tumor in duodenum with dilatation of common bile duct and pancreatic duct dilatation, and para-aortic lymph nodes metastases (Figure 2). The patient underwent pylorus-preserving pancreaticoduodenectomy (PPPD) and para-aortic lymph nodes sampling (Figure 3). Pathologically, the tumor was consisted of tubulovillous adenoma, adenocarcinoma and neuroendocrine tumor (NET) (mitosis: 10/10HPF, Ki-67: 5%). The sampled lymph nodes revealed metastasis from NET



Figure 1: The UGI scopy revealed a tumor protruding from Ampulla of Vater.

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Received Date: 09 Oct 2017

Accepted Date: 20 Nov 2017

Published Date: 08 Dec 2017

Citation:

Lee Y-T. Simultaneous Tubulovillous Adenoma with Focal Adenocarcinoma and Neuroendocrine Tumor in Ampulla of Vater: Report of One Case. Clin Oncol. 2017; 2: 1380.

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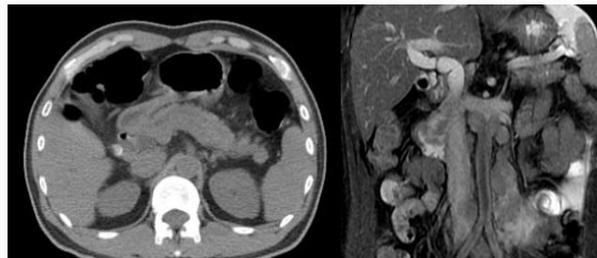


Figure 2: The abdominal CT revealed a protruding mass from CBD and pancreatic duct junction (left). The abdominal MRI showed the duodenal tumor arising from Ampulla of Vaer and several lymph nodes enlargement in paraaortic region (right).



Figure 3: The specimens revealed a 3-cm of tumor arising from Ampulla of Vater (left) and the dilated CBD and pancreatic duct (right).

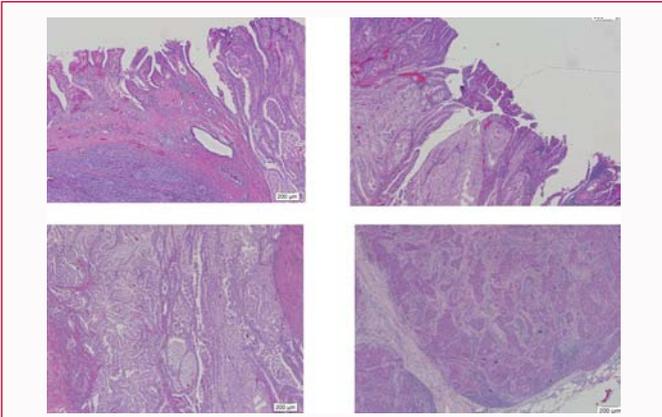
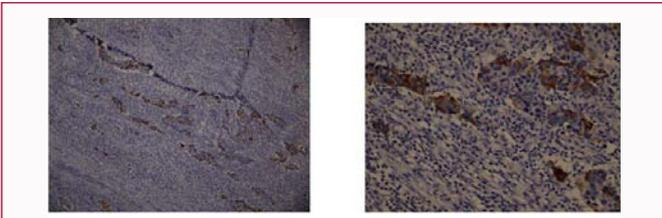


Figure 4: The pathologic reports revealed the tumor consisted of tubulovillous adenoma (superior, left) with adenocarcinoma in the tumor margin (superior, right) and neuroendocrine tumor (inferior, left). The metastatic lymph nodes originated from neuroendocrine tumor (inferior, right) (40X).



100X 400X

Figure 5: The tumor cells express specific staining by chromograinin antibodies immunohistochemically.

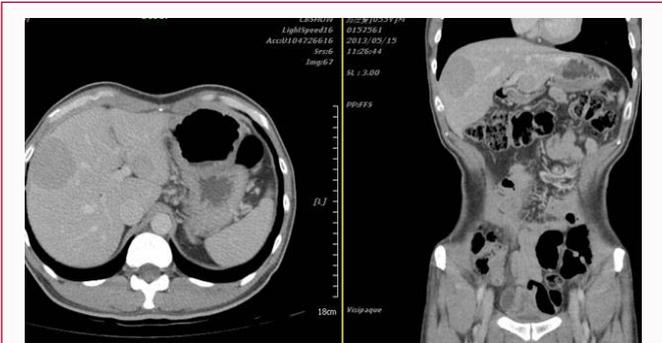


Figure 6: The abdominal CT revealed two isodense tumors in liver (S3,S8) and multiple paraaortic lymph adenopathy (not shown).

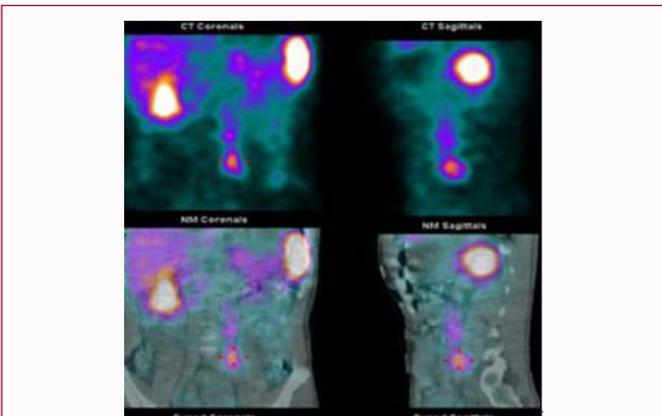


Figure 7: The PET scan revealed hypersignal lesions in liver and paraaortic regions.

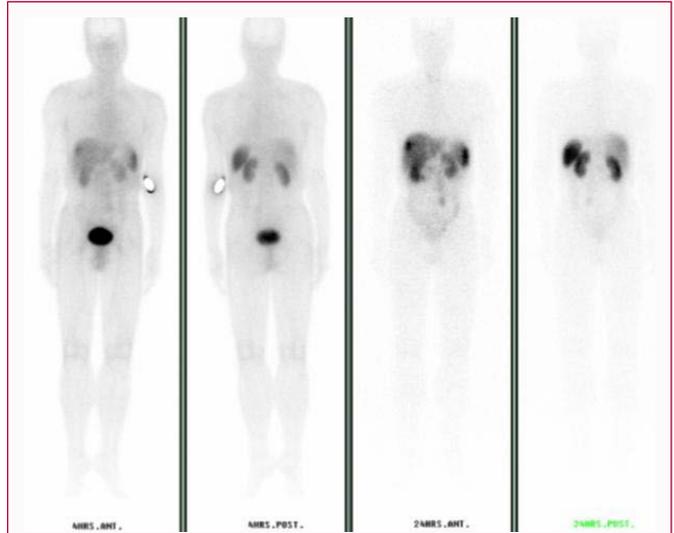


Figure 8: In-111 octreotide scan revealed abnormal tracer acumination in the liver (S8), peri-caval and paraaortic regions.

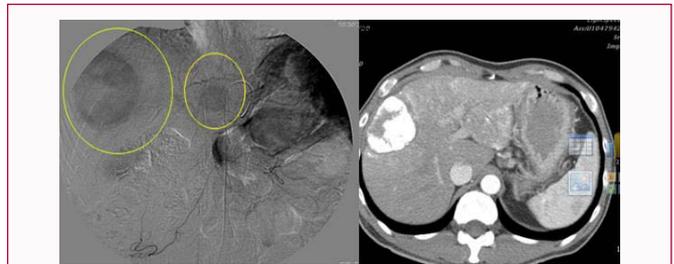


Figure 9: The transarterial chemo-embolization (TACE) was done (left) and follow-up abdominal CT revealed hyperdense mass after TACE (right).

(Figure 4). The neuroendocrine tumor presented with expression of chromograinin (Figure 5). The patient received cytotoxic chemotherapy but developed liver metastases 9 month after the surgery (Figure 6). The PET scan revealed hyper-metabolic lesions in liver and para-aortic regions (Figure 7). The In-111-DTPA-Octreotide scan showed lesions with abnormal accumulation of radiotracer in segment 8 of liver, peri-caval areas, para-aortic and common iliac areas (Figure 8). We prescribed transarterial chemoembolization (TACE) for the liver tumors and somatostatin analogs for systemic treatment (Figure 9). The patient took multiple kinase inhibitors (sunitinib malate) and cytotoxic chemotherapy (Darcabazine) for refractory tumors. However, the patient died of disease progression two years and six months after surgery.

The carcinoid tumor was replaced by neuroendocrine tumors (NETs) in nomenclature recently [1,2]. The incidence of NETs is increasing in the past decades [3]. The NETs are classified according to the mitosis and Ki-67 proliferation factor which correlate with prognosis [4]. The gastroenteropancreatic neuroendocrine tumors (GEP-NETs) have different frequency in different organs with differently biological behavior [2]. The survival time is poor while the disease presents as a metastatic disease with average of 33 months [3]. Mixed adenoneuroendocrine carcinoma (MANEC) cases arising from different organs were reported [5-7]. However, our present case was not MANEC because of separate tumor content in a mass. Besides surgery and chemotherapy, target therapy such as somatostatin analogs is effective in tumor with expression of radiotracer acumination [8]. For our case, para-aortic lymph nodes were

sampled during laparotomy and the frozen section pathologic reports revealed suspicion of carcinoid instead of carcinoma. Therefore, we finished PPPD and waited for analysis for Ki-67 and mitosis to classify the tumor grading. To our best knowledge, our present case has never been reported.

References

1. Sundin A, Vullierme MP, Kaltsas G, Plockinger U. Mallorca Consensus Conference p, European Neuroendocrine Tumor S: ENETS Consensus Guidelines for the Standards of Care in Neuroendocrine Tumors: radiological examinations. *Neuroendocrinology*. 2009; 90(2): 167-183.
2. Niederle MB, Hackl M, Kaserer K, Niederle B. Gastroenteropancreatic neuroendocrine tumours: the current incidence and staging based on the WHO and European Neuroendocrine Tumour Society classification: an analysis based on prospectively collected parameters. *Endocrine-related cancer*. 2010; 17(4): 909-918.
3. Yao JC, Hassan M, Phan A, Dagohoy C, Leary C, Mares JE, et al. One hundred years after "carcinoid": epidemiology of and prognostic factors for neuroendocrine tumors in 35,825 cases in the United States. *Journal of clinical oncology: j the American Society of Clin Onc*. 2008; 26(18): 3063-3072.
4. Plockinger U, Wiedenmann B, de Herder WW. ENETS Consensus Guidelines for the Standard of Care in Neuroendocrine Tumors. *Neuroendocrinology*. 2009; 90(2): 159-161.
5. August C, Maker AV, Weisenberg E. Simultaneous Occurrence of Glandular and Neuroendocrine Components in Lymph Node Metastasis of Gastric MANEC. *Int j surg path*. 2015; 23(5): 375-376.
6. Veits L, Lang-Schwarz C, Volkholz H, Falkeis C, Vieth M, Schulz H. Mixed adenoneuroendocrine carcinoma (MANEC) of the esophagogastric junction predominantly consisting of poorly differentiated neuroendocrine carcinoma. *Endoscopy* 2013.
7. Paniz Mondolfi AE, Slova D, Fan W, Attiyeh FF, Afthinos J, Reidy J. Mixed adenoneuroendocrine carcinoma (MANEC) of the gallbladder: a possible stem cell tumor? *Pathology international* 2011; 61(10): 608-614.
8. Kwekkeboom DJ, Krenning EP, Lebtahi R, Komminoth P, Kos-Kudla B, de Herder WW. Plockinger U, Mallorca Consensus Conference p, European Neuroendocrine Tumor S: ENETS Consensus Guidelines for the Standards of Care in Neuroendocrine Tumors: peptide receptor radionuclide therapy with radiolabeled somatostatin analogs. *Neuroendocrinology* 2009; 90(2): 220-226.