

Vandetanib Experience in a Patient with Ectopic Cushing Syndrome in Metastatic Medullary Thyroid Cancer

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Abstract

Aim: Medullary thyroid cancer (MTC) constitutes 1-2% of all thyroid cancers. Ectopic Cushing's syndrome (ECS) develops in 0.6% of MTC cases. We wanted to present a case with metastatic MTC and ectopic Cushing's syndrome.

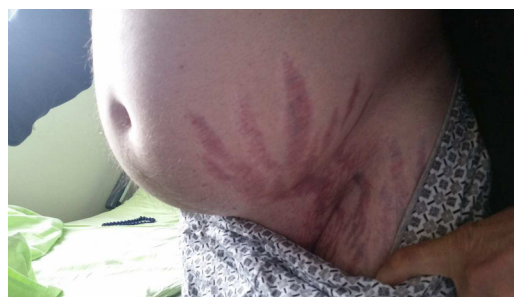
Case: A thirty-seven-year-old male patient was performed bilateral total thyroidectomy and left neck dissection in 2011. Histopathological findings revealed a metastatic MTC. He had a lung and neck lymph node metastases at the time of diagnosis. He received conventional chemotherapy and sunitinib treatment. He was a stable disease without treatment for the past two years. He had cushingoid appearance in October 2016. Laboratory results are shown in Table 1. RET mutation was negative. Bilateral adrenal glands and pituitary were normal. The colonoscopic examination detected the diverticulas. We diagnosed ECS due to metastatic MTC.

Bilateral adrenalectomy was considered. However anesthesia was seen as high risk due to multiple rib fractures and operation could not be performed. Ketoconazole was given for ECS. Twenty days after treatment with ketoconazole, vandetanib treatment started. Urinary cortisol level was decreased to 14 mcg/day in the 6th months after vandetanib treatment. Potassium level was normal after 2 weeks of treatment. In the first year of vandetanib treatment, a new metastatic lesion in the liver was detected with PET-CT. The patient is still under vandetanib treatment.

Conclusion: Ectopic Cushing syndrome due to metastatic MTC is very rare. In the literature, there are some data about the efficacy of vandetanib treatment in metastatic MTC and ECS. In our case, progression with vandetanib treatment can be explained that it can not be used effective dose and time due to the side effects.

Table 1. Laboratory results.

ALT: 42 U/L	ACTH: 118-121 pg/mL
AST: 16 U/L	Cortisol: 23.7 µg/dL
Urea: 23 mg/dL	Urinary cortisol: >1196 µg/gün
Creatinine: 0.62 mg/dL	2 days 2 mg DST cortisol: 22 µg/dL
FPG: 78 mg/dL	2 days 8 mg DST cortisol: 31.3 µg/dL
HbA1c: %5.2	Calcitonin: 8242 pg/mL
Na: 142 mmol/L	CEA: 606.5 U/mL
K: 2.8 - 3.56 mmol/L	



Figure