Spontaneous Cervical Hematoma in a Primary Hyperparathyroidism Patient

Iffet Dağdelen Duran

Kırıkkale Yüksek İhtisas Hospital, Department of Endocrinology and Metabolic Diseases, Kırıkkale, Turkey

Abstract

Introduction: Thoracocervical ecchymosis can be produced by trauma, dissecting aortic aneurysm and complications due to medical procedures and hemorrhage of parathyroid adenoma. Extracapsular hemorrhage is a rare interpretation of a parathyroid adenoma (1). We presented our case with spontaneous thoracocervical ecchymosis who was on follow-up for parathyroid adenoma.

Case: 64 year old man arrived our clinic with complaint of painful discoloration on his neck and chest which appeared one day ago spontaneously. The area of ecchymoses was located centrally through neck extending to thorax (Figure 1). Before the admission, he had been followed up by our institution for primary hyperparathyroidism and primary hypothyroidism. In his medical history there was also Behçet’s disease and he was on colchicine, levothyroxine 50 mcg/day used regularly and acetyl salicylic acid which he used seldomly. His vital signs were absolutely normal just like his coagulation studies and hemoglobin level. He was hospitalized regarding complicational risks due to hematoma’s localization.

In his latest follow-up before hematoma formation, in thyroid ultrasonography (USG) there was moderate heterogeneity, a 2x3x4 mm hypoechoic nodule in left upper pole and a 9x11x17 mm hypoechoic lesion compatible with parathyroid adenoma in left thyroid lobe inferoposterior region. Tc99m parathyroid scintigraphy revealed a hyperactive lesion in the same localization with the susceptible parathyroid lesion in USG. After the formation of ecchymoses the novel ultrasonographic investigation revealed a heterogenic area surrounding the left thyroid lobe, extending to common carotid artery laterally. Due to this heterogeneity the former parathyroid lesion in USG could not be visualized. Priorly, the adjusted calcium (Ca) levels could not ever be dropped below 10.5 mg/dl with medication. The results were as follows: Ca: 11.1 mg/dl, albumin (alb): 4.7 g/dl, phosphorus (P): 2.6 mg/dl, magnesium (mg): 1.8 mg/dl, creatinine (cre): 1.0 mg/dl, parathormone (PTH): 92 pg/ml, 25-hydroxyvitamin-D3(25-OH-vitD3): 15 ng/ml, thyrotropin (TSH): 2.5 IU/ml. After a period of vitD3 administration and following ecchymoses formation, Ca: 9.5 mg/dl, P: 2.3 mg/dl, mg: 1.9 mg/dl, cre: 1.1 mg/dl, PTH: 34.5 pg/ml, 25-OH-vitD3: 38.5 pg/ml were found. Even though he used acetylsalicylic acid very seldomly, it was absolutely given up and he was given symptomatic treatment for the pain. After two days the ultrasonographic investigation revealed partial resolution of hematoma with maintenance in laboratory findings. He was discharged and invited for control regarding suspicion of parathyroid infarct.

Conclusion: Thoracocervical ecchymosis would occur due to hematoma from a parathyroid adenoma. Hypercalcemia due to release of PTH from damaged gland, hypocalcemia associated with extensive parathyroid destruction (1) or normocalcemia just like in our case are possible laboratory results following hematoma. Anticoagulation and hemorrhagic diathesis may be a predisposing factor in neck hematomas (2). Hemorrhage into thyroid cysts are more common, however they are usually intracapsular depending on thyroid gland’s thicker capsule while hematomas associated with parathyroid adenomas are usually extracapsular and may invade adjacent tissues including even mediastinum. Potential serious complications are rapidly progressive airway and esophageal obstruction. When the patient is stable, conservative management is preferred followed by elective parathyroid surgery.

References

1. Rehman HU et al. Spontaneous cervical hematoma associated with parathyroid adenoma. CMAJ. 2010 Sep 21;182(13):E632