**Thyrotoxicosis Leading to Adrenal Crises Reveals Primary Bilateral Adrenal Lymphoma – Case Report**

**C. Roque, R. Fonseca, C. Bello, C. Monti, R. Ferreiro, C. Vasconcelos.**

Endocrinology Department - Hospital de Egas Moniz, Centro Hospitalar de Lisboa Ocidental, E.P.E.

Lisbon, Portugal

**DOI:** 10.3252/pso.eu.18ECE.2016

---

**Introduction**

Amiodarone use may be associated with secondary severe organ dysfunction. Thyrotoxicosis develops in 15% cases. Primary bilateral adrenal lymphoma is a rare malignancy. It frequently presents bilaterally and with symptoms of adrenal insufficiency. Symptomatology for both conditions is nospecific, especially in the elderly population, and a high suspicion index is necessary to reach appropriate diagnosis.

---

**Case Report**

**Female gender, 78 year old. Institutionalized.**

Personal history: Hypertension, Atrial Fibrillation and Diabetes Mellitus for 15 years without complications. Medication: perindopril, amiodarone, sivastatin, metformin, trazodone. She had recently been prescribed antibiotic for UTI complicated by vomiting and hypochloremic hypernatremia. Trazodone was stoped.

**Tranferred to the Endocrinology ward.**

**Type 2 Amiodarone Induced Thyroiditis**

She said she did not complied with the prescribed antibiotic for the UTI.

At physical examination: diffuse abdominal pain on palpation, slight dehydration. Laboratory: Leucocyturia without leucocytosis, PCR 7.4, Na 125 mmol/l, K 4.56 mmol/l, TSH 0,01 uU/ml, FT4 68 (10-18) pmol/l, FT3 6,34 (4-8) pmol/l, negative anti-TPO and anti-TTG.

**Admitted diagnosis: Urinary tract infection and thyrotoxicosis.**

**Thyroid US**

Heterogenous multinodular goiter. Doppler evaluation showed decreased vascular signal.

**Endocrine tumours and neoplasia**

**Only sepsis? Adrenal Insufficiency?**

Fluid resuscitation and hydrocortisone led to amelioration of the hemodynamic instability and clinical improvement, with high dose hydrocortisone requirements for stability.

**Adrenal Insufficiency admitted**

No clinical conditions to switch/stop hydrocortisone and perform short synacthen.

**24h urinary Metanephines**

Withing reference range.

**Bronchofibroscopy**

Endobronchial primary lesion? No malignant cells in the BAL/brushing.

**Adrenal biopsy?**

No safe anatomical route due to no patient colaboration.

**Right and left justa-renal heterogenous solid nodules (6,6 and 7 cm respectively) and pleural effusion.**

**Thoracocentesis**

Exudate, no malignant cells.

**Contrast CT**

Sugestion of an endobronchical primary lesion with hepatic and adrenal bilateral secondary deposits. The adrenal lesions were heterogenous masses with areas of necrosis without calcifications hat late contrast retention.

**Left pleural effution.**

**Left side: Ureteral compression, invasion of the kidney and vascular structures.**

**Conclusion**

Primary adrenal lymphoma is a rare cause of adrenal insufficiency. Although rare it must alaways integrate the differential diagnosis, specially in the elderly patient where symptoms are subtle and progression is often fast and fatal. Thyrotoxicosis, specially when amiodarone-induced, may be difficult to control rapidly. Transient periods of worsening thyroid function acompain infectious processes. Thyrotoxicosis worsens the adrenal insufficiency picture leading to increased need of substtiutive dose requirements and dose adjustments. Mortality rises significantly.