1. Introduction

Diffuse large B cell lymphoma is the most common lymphoma and accounts for approximately 25 percent of all non-Hodgkin lymphoma. There is a male predominance with 55 percent of cases occurring in men; the median age presentation is 64 years old and incidence increases with age. Systemic “B” symptoms (fever, weight loss, drenching night sweats) are observed in 30 percent of patients, and the serum lactate dehydrogenase is elevated in over one-half. Bone is the primary origin of the disease in only 1% of non-Hodgkin lymphoma, accounting for approximately 3% of all primary bone malignancies. Primary vertebral lymphoma presenting without sites of systemic involvement is exceedingly rare. Spinal and epidural non-Hodgkin lymphoma has been described in small case series when it has involved the thoracic and lumbar spine.

2. Case report

75-year-old white male.
Past medical history: arterial hypertension, type 2 diabetes mellitus, dyslipidemia, ischemic heart disease and chronic gastritis.

05/03/2013

- Started with holocranical headache and right hemifacial hypesthesia.
- CT scan: frontal subcortical hypodensity compatible with ischemic vascular disease not recent.
- Persistence of symptoms. Anorexia and vomiting not related to food ingestion, weight loss of 4kg. Diplopia, paresthesia of right V (V2 and V3) and left VI cranial nerve.
- In an attempt to make a lumbar puncture, the patient had a vasovagal syncope. The ECG showed sinus bradycardia with 1st degree AVB and complete block of right bundle. He repeated 2 more episodes of syncope and was diagnosed of central hypotropism.

25/03/2013

- Brain MRI showed infiltrates lesions, with replacement of bone marrow fat of clivus and probably the body of C2, characterized by hypodensity in the sequence T1 and clival isointensity in T2 with enhancement after gado-lumin administration. The hypophysis was enlarged and the left cavernous sinus tumescence.

08/04-19/04/2013

Admitted to Internal Medicine Department. He maintained headache aggravated with recumbency. Pain with distestesic characterist. He had headache and right hemifacial hypesthesia.


Hemoglobin: 11 g/dl (13.5-17)  
VGM: 83 fl (81.8-95.5) 
HGB: 29.7 pg (27-32.3) 
LDH: 259 U/L (87-241) 
VS: 41 elevated 
BK cultural gastric aspirate: Negative 
Tuberculin test: Negative 
T4L: 0.64 ng/dl (0.76-1.46) 
TSH: 0.219 uIU/mL (0.258-3.74) 
Testosterone: 105.24 ng/dl (241-827) 
Cortisol: 4.21 ug/dl (4.3-22.4) 
B2 microglobulin: 2071 ng/dl (1090-2530) 
Serum protein electrophoresis: No alterations 
Total calcium: 8.3 mg/dl (8.8-10.1) 
ACE: 7 U/L (8.55) 
PSA: 1.36 ng/ml (<4.0) 
ANA: Nonreactive 
ANCA: Negative 
HIV, HVC and HVB: Negative

Upper gastrointestinal endoscopy: Normal
Lower gastrointestinal endoscopy: Normal
Gastric blind biopsy: Negative
Body CT: Normal
Lumbar punction: Spinal liquor showed no alterations

18-FDG PET: Exposed foci of hypermetabolism in the clivus, C2, D1, D4 and D9 vertebrae; right side pterygoid muscle; lateral aspect of the fourth left costal arch and proximal shaft of diaphysis of the right humerus, with suspicion of osteoelastic etiology, although the hypothesis of granulomatous disease could not be excluded

Biopsy of the body of the 9th dorsal vertebra: Performed by an Interventional neuroradiology team with histology confirming the diagnosis of diffuse lymphoma of large B cells, CD2 negative with CD43+, CD3- CD20+ immunohistochemical profile

Myelogram: No changes in the three hematopoietic lines

During the hospitalization, at 15/04, his condition worsened with symptoms compatible with achieving cochlear’s nerve with gait instability. He kept headache and neurological deficits with evidence of disease progression with involvement of V1 and possibly IX pair and altering proprioception.

Clinically at this time:
The patient showed improvement of neurological symptoms with reversal of diplopia and right hemifacial hypoaesthesia improvement. He regained improving gait, moves alone without vertigo.

3. Discussion and Conclusion

- Almost 85% of NHLs are of B-cell origin. Although this type of lymphoma usually starts in lymph nodes, they may as well appear as extranodal disease, arising, most often, from the gastrointestinal tract. Primary bone lymphoma with neurologic presenting symptoms is rarely reported in literature. The site of the tumor only is a significant predictor when the skull is affected, because of the risk of central nervous system lymphoma due to direct extension into the brain.
- The diagnosis is made by excisional tissue biopsy, most commonly a lymph node. This case shows the diagnosis challenge often posed by atypical forms diseases.
- The prognostic in this stadium and with this treatment at 30 months is 50% for event-free, 56% for progression-free and 59% of overall survival.
- Multidisciplinary assessment of this patient was essential for a rapid diagnostic and treatment intervention, ensuring the best clinical prognosis possible.

Bibliography:
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