SOLITARY EXTRAMEDULLARY ANAL PLASMACYTOMA IN AN HIV POSITIVE MALE

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INTRODUCTION

- Solitary extramedullary plasmacytomas (SEP) are rare tumors that comprise approximately 3% of all plasma cell neoplasms.
- 85% are localized to the head and neck region, specifically the oral cavity and upper respiratory tract.1-4
- Gastrintestinal plasmacytomas account for less than 10% of all extramedullary plasmacytomas.5,6 Stomach and small bowel are the most commonly involved sites.7

We present a case of a solitary plasmacytoma of the anal canal.

CLINICAL PRESENTATION

A 37-year-old Hispanic male with a history of HIV on anti-retroviral therapy, Hepatitis C and morbid obesity was admitted to our hospital for atypical chest pain. He ruled out for acute myocardial infarction. During further questioning, he complained of a small amount of bright red stool with refection. The patient denied melena, abdominal pain, or weight loss. His vital signs were stable without orthostasis. Abdominal examination revealed obesity, but was otherwise unremarkable. Rectal examination showed normal tone with an area of firm, hard tissue involving the anal sphincter. Tender external hemorrhoids were palpated and stool guaiac was positive.

Labwork: normocytic anemia with hemoglobin of 11.1 g/dL (12-16) decreased from 13.7 g/dL (135-145), potassium 4.6 mEq/L (3.5-5.5), BUN 9 mEq/L (8-23), creatinine 0.9 mEq/L (0.6-1.2), glucose 77 mg/dL (70-100), calcium 8.6 mg/dL (9.2-11), albumin 3.3 g/dL (3.8-5.0), total protein 6.3 g/dL (6.8), ALT 33 IU/L (4-36), AST 46 IU/L (8-33), total bilirubin 1.0 mg/dL (0.1-1.2) and Alkaline phosphatase 105 IU/L (38-126).

MANAGEMENT

The patient underwent colonoscopy which showed internal hemorrhoids and an area of indurated tissue at the anal verge that was excoriated and bled easily. A biopsy of this area revealed a homogenous collection of tissue comprised of malignant appearing monoclonal plasma cells consistent with a plasmacytoma. Immunophenotyping revealed the tumor to be CD 138+, CD 20+, CD 5+, CD 10+, BCL2+, BLC 6- with Kappa light chain restricted population. A CT scan of abdomen and pelvis with oral, intravenous and rectal contrast failed to demonstrate any evidence of mass, adenopathy or metastasis. A skeletal bone survey was negative. Serum beta2 microglobulin was 3.38 mg/dL (< 2.51). Serum and urine protein electrophoresis did not reveal the presence of a monoclonal protein. Bone marrow aspiration and biopsy was normal with orderly and full trilineage hematopoiesis present. Flow cytometry and Fluorescent in-situ hybridization analysis of the bone marrow aspirate did not detect monoclonal plasma cells / B cell population. The patient was diagnosed with isolated extramedullary anal plasmacytoma. He received definitive curative intent treatment with primary multi-fraction external beam radiation therapy to 50.40 Gy.

DISCUSSION

Plasma cell disorders occur with increased incidence in HIV positive patients, and frequently develop at a younger age and in unusual sites.4-9 Plasma cell tumorigenesis in HIV may be explained by polyclonal B cell activation due to immunostimulation related to the HIV virion or other antigens,10-13 latent Epstein-Barr virus infection induced B cell proliferation14-17 and dysregulated cytokine production induced by the HIV virus.18

SEP in the anal region frequently presents as tenesmus, bleeding per rectum, anemia or anal mass. It can mimic a perineal abscess.

The standard treatment of localized plasmacytoma involves local external beam radiation therapy and surgery, if feasible. SEP, unlike solitary osseous plasmacytoma, are often cured with local radiation therapy as they remain localized and do not progress to multiple myeloma as frequently as solitary osseous plasmacytoma.

CONCLUSION

Clinicians should be aware that rectal bleeding in young patients with HIV or any alarm signs such as anemia or a family history of gastrointestinal malignancy should be referred to a gastroenterologist and be considered for colonic examination.

REFERENCES