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Case Report

CASE REPORT

An unusual cause of suicidal ideations

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Abstract

While the differential for suicidal ideations is broad, it is known that pathologic brain issues are a cause. Here, a case is presented of a gentleman who had an unusual growth into his frontal lobe leading to the suicidal ideations. The fact that he is chronically immunosuppressed likely led to this unique situation.

INTRODUCTION

When considering patients who present with suicidal or homicidal ideations without a known history, a wide variety of conditions need to be considered. Brain imaging is often part of the workup. Abnormal growths are associated with these sorts of behavior changes [1]. In a gentleman who is chronically immunosuppressed, the differential diagnosis should be broader than in those with competent immune systems. This case highlights this principle.

CASE REPORT

A 52-year-old man with a complicated past medical history of chronic kidney disease and small bowel transplant status post colonoscopy leading to ischemic bowel presented to the emergency room with homicidal and suicidal ideations. The patient had the small bowel transplant nearly 3 years prior to the emergency room visit. He had been maintained on tacrolimus to prevent bowel rejection, but otherwise was on few medications and in otherwise good health. According to his wife, he had never exhibited such behavior in the past and there were no obvious precipitating factors to this sudden attitude change. His erratic behavior was exhibited by the patient taking ~24 lorazepam tablets throughout the day prior to admission and firing shots from a gun in their home, leading to police involvement. He had also complained of back pain for several days prior to the emergency room visit. He had no exposure to other drugs and his medications, including his tacrolimus, had not changed.

Owing to this bizarre behavior, a workup was started. Laboratory work in the emergency room revealed a serum creatinine of 1.6 mg/dl, but was otherwise unrevealing. Ultimately, an MRI was performed (Figure 1). Imaging revealed several contrast-enhancing lesions within the diploic space of the calvarium, the largest of which was a 3.6 × 3.6 × 1.8 cm plasmacytoma in the right parietal calvarium near the vertex. The mass extended through the inner table leading to displacement of the underlying left parietal cortex, and extension through the outer table contributed to involvement of the overlying soft tissue of the scalp. Multiplanar and multisequence imaging of the cervical and thoracic spine with and without contrast indicated multiple enhancing foci within the left T6 pedicle and T4, T5, T7 and T8–T12 vertebral bodies. Lumbar spinal imaging also revealed areas of altered marrow signal in the L2–L5, S1 and S2 bodies, giving the overall impression of metastatic disease. A biopsy was pursued and was consistent with plasmacytoma.

After detection of the plasmacytoma of the skull and spinal lesions, the patient was recommended radiation and chemotherapy for multiple myeloma. He received 10 sessions of radiation therapy to the skull lesion, and his suicidal ideation and aberrant aggressive behavior resolved after the completion of radiation treatment. He was also started on bortezomib subcutaneous

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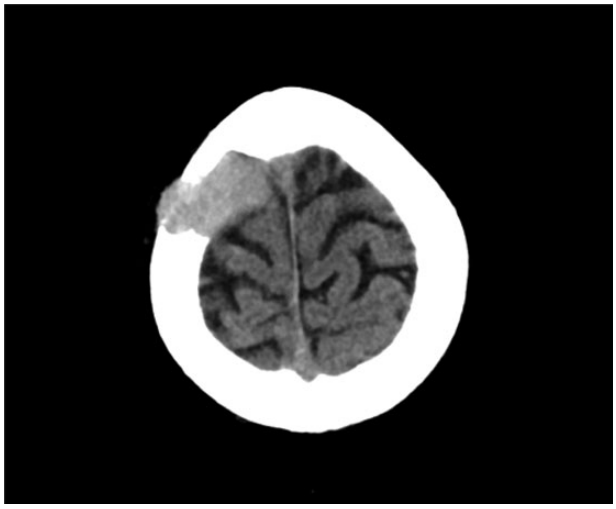

Figure 1: An MRI image showing the skull-based plasmacytoma growing through the skull and into actual brain tissue.

therapy twice per week every 3 weeks for four cycles. His tacrolimus was reduced although not completely discontinued. He has suffered no ill effects to the bowel transplant. Presently, he continues to follow up in the clinic in remission with negative PET scans. His monoclonal protein test remains negative and serum immunoglobulin levels remain normal post treatment.

DISCUSSION

While there is generally a broad differential diagnosis for those presenting with sudden suicidal behavior, brain imaging is often part of the workup. To our knowledge, this is the only case of a plasmacytoma being the cause of this degree of behavioral change. There have been previous reports of mood changes from plasmacytomas, but not to the point of suicidal of homicidal tendencies [2]. While plasmacytomas are still relatively uncommon, there are more being diagnosed in recent years [3]. It is suggested that plasmacytomas may occur at a higher frequency in those that are on chronic immune suppression [4]. This case highlights the idea that, in those who are immunosuppressed, the differential of sudden behavioral changes needs to be expanded.

No ethical approval was required. A signed consent was provided by the patient described above. Guarantor: Daniel Landau, MD.

CONFLICT OF INTEREST STATEMENT

None declared.

REFERENCES

1. Cao J, Chen JM, Kuang L, Ai M, Fang WD, Gan Y, *et al*. Abnormal regional homogeneity in young adult suicide attempters with no diagnosable psychiatric disorder: a resting state functional magnetic imaging study. *Psychiatry Res* 2015;**231**:95–102.
2. Bakar B, Tekkok IH. Plasmacytoma of the skull vault. *Turk Neurosurg* 2012;**22**:95–8.
3. Dores GM, Landgren O, McGlynn KA, Curtis RE, Linet MS, Devesa SS. Plasmacytoma of bone, extramedullary plasmacytoma, and multiple myeloma: incidence and survival in the United States, 1992–2004. *Br J Haematol* 2009;**144**:86–94.
4. Hansen PB, Nielsen SL. Successful treatment of posttransplant EBV-associated lymphoma and plasmacytoma solely localized to the CNS. *Case Rep Hematol* 2012;**2012**:497614.