Epidural Lymphoma Mimicking a Bilateral Acute Epidural Hematoma

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CLINICAL IMAGE

A 90-year-old woman who had suffered a fall at home presented with mild confusion, retrograde amnesia and headaches to our emergency room. Clinical examination revealed soft biparietal tumescences without laceration of the overlying skin. CT scan of the head was performed (Figure 1a+b) and showed a biparietal lenticular shaped hyperdense lesion extending both into the cranial vault and the subcutaneous tissue. Of note, no lesion of the bone flanking the lesion was present (Figure 1b). We suspected an epidural hematoma despite the unusual bilateral appearance and the untypical aspect of the subcutaneous swelling. The patient rapidly deteriorated neurologically and developed anisocoria. Biparietal craniotomy was immediately performed. To our surprise, the lesion was not an epidural hematoma but a soft whitish tumor both subcutaneously and in the epidural space. Gross total tumor resection was performed (Figure 1c). Histopathology revealed a diffuse large B-cell non-Hodgkin lymphoma. The patient promptly recovered without neurological sequelae. She refused further staging and treatment and died 4 weeks later.

DISCUSSION

The clinical history of our patient with a fall followed by an interval with only mild neurological symptoms and rapid secondary deterioration with signs of acute compression of the brainstem represents the textbook case of an epidural hematoma. The imaging finding of a bilateral lesion consistent with epidural hematomas was surprising as bilateral epidural hematomas are exceptionally rare with few cases described in small series and case reports [1,2]. Emergency craniotomy revealed the true diagnosis of a tumor, later characterized as a diffuse large B-cell non-Hodgkin lymphoma. Epidural lesions of hematological origin causing neurological symptoms are frequently encountered at the spine [3]. In contrast, intracranial epidural lymphomas, are exceedingly rare and frequently misinterpreted as meningiomas or epidural and subdural chronic or acute hematomas. The majority of these cases are indolent marginal zone lymphomas but other entities including diffuse large B-cell non-Hodgkin lymphoma as in our patient have been described in few cases [4,5]. A very unique imaging feature of the case presented here that we did not encounter in comparable published cases is the extension of the tumor both on the in- and outsides of the calvaria. Notably, the bone itself did not show any signs of destruction both on CT and intraoperatively. Given the uncommon extension of the lymphoma it remains elusive whether the lymphoma originated from intra- or extracranial tissue. Since our patient refused staging we are unaware of further systemic manifestations.

REFERENCES

Figure 1 Pre-operative CT scan of the head (a+b) showing a biparietal hyperdense lenticular shaped space occupying lesion resembling the typical aspect of a bilateral epidural hematoma. The lesion extends in a biconvex fashion both into the cranial vault and the subcutaneous tissue without affecting the integrity of the bony skull (b). Post-operative CT (c) shows gross total tumor resection achieved by biparietal craniotomy.