

Emergency department presentation predicts poor outcomes after meningioma removal

A meningioma is one of the most common forms of a brain tumor. Unlike many other types of brain tumors, meningiomas are typically associated with relatively favorable outcomes even when they require surgical treatment. In the past few decades, increasing attention has been paid to patient factors and clinical details that help predict increased risk of tumor recurrence or death after the surgical removal of a meningioma. In our part, we looked at patients who presented to the emergency department (ED) within 3 months of a surgical removal of a meningioma. We then compared these patients to those who didn't present to the ED to determine the long-term significance of these ED presentations.

We reviewed the cases of patients undergoing surgical removal of a meningioma at our hospital between 2001-2013. We found 239 patients who met the selected criteria for our study and reviewed their medical records for any ED presentation within 3 months of their brain tumor removal. Over 30% of patients presented to the ED within 3 months of their operation with a neurological or wound-related complaint. Overall, headache, visual changes, wound drainage, and confusion were the most common complaints. Patients with such presentation to the ED were much more likely to eventually have a tumor recurrence and re-operation in addition to having a higher risk of mortality (roughly 4.7 times that of those who didn't present to the emergency department). Overall, patients who had presented to the ED were more likely to have a worse long-term clinical outcome than those who didn't.

Presentation to the ED has been previously described as an indicator of poor outcomes after a number of different surgical operations. We were able to confirm this relationship in patients undergoing resection of a meningioma. Unfortunately, we are limited in what we can recommend with regard to the ongoing care of such patients. Further studies with larger samples of patients are needed to verify our findings and to help better stratify risk in these patients. It may be that these patients might benefit from more aggressive imaging and clinical follow-up with their surgical provider after meningioma removal. The potential benefit of more aggressive follow-up in this patient population has not yet been proven.

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[Early postoperative emergency department presentation predicts poor long-term outcomes in patients surgically treated for meningioma.](#)

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