A 68-year old women presented to the emergency room with acute onset of paraparesis in the lower extremities. MRI findings were inconclusive for cause but showed cord compression. Intra-operative findings demonstrated an intratumoral hemorrhage and pathology was consistent with meningioma.

CONCLUSIONS: This is the first report found in the English literature of a patient who first develops symptoms from a spinal meningioma with spontaneous intratumoral hemorrhage presenting with acute paraparesis. MRI findings in retrospect match surgical intra-operative findings. Prompt surgical intervention can result in complete resolution of neurological deficits.

2016

Whole exome sequencing followed by Sanger sequencing validation was performed for the analysis of spinal meningioma tissue obtained from a 42-year-old Japanese female. The sequencing identified a nonsynonymous mutation of c.3597G>C, resulting in p.Q1199H, in the FAT atypical cadherin 2 (FAT2) gene. FAT2 is homologous to the Drosophila Fat (Ft) gene, which belongs to the cadherin superfamily. Drosophila Fat is involved in PCP, tumor suppression and Hippo (Hpo) signaling, which is associated with Mer. Taken together, the results of the present study concluded that human FAT2 may function as a key molecule that governs not only PCP, but also NF2-Hpo signaling in arachnoid cells; thus, a mutation in this gene may result in spinal meningioma [1)].

1)
Tate G, Kishimoto K, Mitsuya T. A novel mutation of the FAT2 gene in spinal meningioma. Oncol Lett. 2016 Nov;12(5):3393-3396. PubMed PMID: 27900010; PubMed Central PMCID: PMC5103956.