



Title:

MR Findings in Spinal Hemangioblastoma: Correlation with Symptoms and Surgical Findings - The Local Experience

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Abstract:

BACKGROUND AND PURPOSE

Similar study has been performed by Miyasaka et al. in 2001, detailing MR features of spinal haemangioblastoma and its clinical relevance. However, to our knowledge, there was no similar study has been performed in Hong Kong. The purpose of this study was to evaluate the MR features' correlation with clinical and surgical findings in local setting.

METHODS

MR whole spine and the corresponding reports of 6 patients were reviewed via the Electronic Patient Record system (ePR) of Hospital Authority. The symptoms and surgical findings were also traced. They were reviewed retrospectively to see if there was any correlation

RESULTS

2 patients with VHLD were asymptomatic. Their spinal tumors were discovered by screening MRI. High index of suspicion can help early detection of spinal haemangioblastoma in patient with VHLD and control the tumors before neurological deficit.

In the remaining 4 patient, the tumor size was related to the symptoms. 2 patients, with small tumor size <20mm, presented with sensation disturbance only and no motor disturbance. 2 patients, with tumor size >20mm, presented with motor disturbance. For these 2 patients, the tumors were also associated with extensive syrinxomyelia in MRI. This probably signified the high degree of tumor compression and was accountable for the symptoms.

All 6 tumors demonstrated T1 hypo/isointense with T2 hyperintense signal and enhancement with GD contrast. These typical MR features can help the diagnosis of spinal haemangioblastoma.

All 6 tumors were correctly localized corresponding to the contrast enhancing lesions noted in MRI. One patient encountered substantial bleeding during piecemeal removal of the tumor. Preoperative angiogram can help delineate the anatomy and reduce operation complication.

CONCLUSION

MR features help the diagnosis of spinal haemangioblastoma. Screening MRI in patients with VHLD can detect the disease early before neurological deficit.