Ganglioneuromas

INTRODUCTION

Ganglioneuromas are rare, slow growing, benign tumors that generally arise from the ganglion cells of the sympathetic chain, but they may also arise from sympathetic nerves as well as from peripheral nerves. They represent the most benign form of neurogenic tumor with 60% of them occurring in children and young adults (2, 3, 4, 5, 6). The ratio of male to females is approximately 3:2. They occasionally grow to a large size but total excision using microsurgical techniques is often possible, and may be curative.

Ganglioneuromas are considered, as a rule, benign tumors. However, in exceptional cases, intra-tumoral areas of malignant transformation, metastasis, and the development of malignant peripheral tumors arising from ganglioneuromas have been described (7, 8, 9, 10, 11). Although they usually occur in relation to the adrenal medulla and sympathetic chain in the retroperitoneal and retroepiuretual spaces, they may also be found along in the intestinal tract, and occasionally in a peripheral nerve. Multiple locations are possible. They have also been described in association with Neurofibromatosis 1 diseases (12, 13).

CASE REPORT

The patient S.B is a 23 year old man who hospitalized on 30 August 2014 at males’ neurosurgery ward with right extremities hemiparesis which had been started for one year. After clinical and neurological examinations, the first diagnosis, Cervicocecal tumor was proposed. Then for the final diagnosis MRI & CT scan were recommended (Fig 3-6). Having diagnosed a vast extra axial tumor at the C1 & C2 levels at MRI, Neurinoma was considered. His laboratory tests revealed the patient had leukocytosis (20.2 per microliter) with an erythrocyte count of 4.08 permicroliter and hematocrit of 36.3%. Other factors were about normal. Later that day the patient underwent a laminectomy operation on his C1 & C2 levels and the tumor of that region which concurrently was intra- and extradural completely was evacuated. After operation on 1 September 2014 he had a suitable general condition, sensory and motor function tests of extremities and his right side were considered. His laboratory tests revealed the patient had leukocytosis (% of WBC 20.2), other factors were about normal. Later that day the patient underwent a laminectomy operation on his C1 & C2 levels and the tumor of that region which concurrently was intra- and extradural completely was evacuated. After operation on 1 September 2014 he had a suitable general condition, sensory and motor function tests of extremities and his right side were considered. His laboratory tests revealed the patient had leukocytosis (% of WBC 20.2), other factors were about normal.

CONCLUSION

Ganglioneuromas occurring within the spinal column are exceedingly rare and may grow to a large size. Despite this size and the common involvement of both intra- and extra-spatial compartments, favourable outcome, with good functional recovery is often possible after complete excision using microsurgical techniques.

References