Spinal Myxopapillary Ependymoma Epidemiology

The myxopapillary subtype of ependymomas (MPE) occurs mostly in the thoracolumbar region and is the most common form of ependymoma in the lumbar spine [1) 2) 3) 4)].

In one study of 77 myxopapillary ependymomas [5)]. these tumors represented 27% of all spinal ependymomas and 90% of tumours in the conus medullaris [6) 7) 8) 9) 10) 11) 12)].

Usually occurs in the adult population in the third and fourth decades of life and affect males more frequently than females [13) 14) 15)].

Abdallah et al. retrospectively reviewed the medical records of 38 primary spinal myxopapillary ependymoma cases who underwent surgery at 2 neurosurgical centers spanning 16 years, from 2004 to 2019. All pediatric cases (patient age <18 years) who were diagnosed with MPE and re-presented with spinal seeding/drop metastases (SSM) were selected as the core sample for this study. Relevant literature was briefly reviewed.

Three pediatric MPE cases (2 females and 1 male) experienced SSM. The mean age at first presentation was 12.0 ± 1.0 years. The mean preoperative course was 2.9 ± 1.2 months. The predominant location was the lumbar spine in 2 tumors (both originated from filum terminale [FT]). Two tumors were located intradural intramedullary. Gross-total resection was achieved in 2 patients. No patient had neurofibromatosis type 2. No adjuvant treatment was given after the first surgery. The mean period between the first diagnosis and diagnosis of SSM was 44.0 ± 31.5 months. The location of SSM in all patients was the sacral spine (1 patient experienced distant metastasis in her brain besides her sacral metastasis). The mean follow-up was 68.3 ± 53.7 months.

They found a statistically significant relationship between SSM in pediatric MPEs and the intramedullary location, FT origin, and number of affected segments. Close clinical and radiological follow-up is essential for pediatric MPE patients. [16)].

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