I read with interest the manuscript “A case of early extraneural medulloblastoma metastases in a young adult” reporting extradural dissemination of an adult medulloblastoma. This 28 years old patient treated by whole axis radiotherapy and no chemotherapy, developed tumor dissemination after only 8 months, even though there had been no sign of local tumor recurrence in the posterior fossa. The authors have mentioned disruption of blood–brain barrier, lymphatic and blood born tumor dissemination and peritoneal seeding after ventriculoperitoneal-shunt insertion as the possible mechanisms for these kinds of secondary tumor presentations. The concept is generally and historically well taken but few issues should also be raised before coming to a strict conclusion:

- Working on a good histology sample of the tumor, not only through regular Hematoxylin and Eosin staining but using Immunohistochemistry techniques and elucidating the molecular array of the subtypes of medulloblastomas (i.e., WNT, sonic hedgehog, Group 3 and 4 tumors) and comparing them with tumor cellularity patterns are necessary to predict the aggressive nature of the tumor before making decision for the type of adjuvant therapy. The tumor being aggressive at the time of surgery demonstrated by contrast-enhanced magnetic resonance imaging of the whole spine, tumor cell dissemination at the time of surgery, the flexed position of the head during surgery, etc. Have been the common variants always evaluated in different studies even though no one knows which one is the independent or the confounding factor.

- The time interval for the extradural lesion to become symptomatic was too short! The histopathological confirmation is necessary to rule out that the lesion was not a ‘primary multifocal PNET (cPNET + pPNET) in every similar case of a heavily and compactly cellular intra-axial posterior fossa tumor.

- Aggressive chemotherapy is usually started before radiation in most of the protocols administered for treatment of medulloblastomas to develop more efficient therapeutic impact of whole axial radiation.1-3

Whether the suggested mechanisms are the factual factors in early tumor dissemination or it is the tumor biology which is quite variable and the powerful factor? Which one is the main and/or the confounding element? Each one the mentioned questions can be a hypothesis for a new PICO for a Yong researcher.

Anyhow, the manuscript is well written and can certainly raise several questions for younger neurosurgeons interested in pediatric neurosurgery.

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