Anti-VEGF therapy with Bevacizumab in adult primary anaplastic pilocytic astrocytoma as an attractive therapeutic option: a case report.

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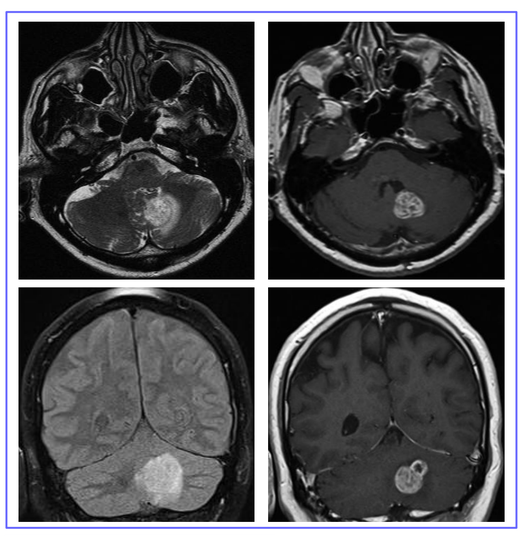
Introduzione

Pilocytic anaplastic astrocytoma (PAA) is an uncommon and not well defined entity that occurs rarely in adults with predilection for infratentorial location (74.9%), especially the cerebellum (59.3%). Long-term outcomes in adults are strongly related to the presence of anaplastic features, brainstem involvement and extent of surgical resection. Another challenging point is standard and second line treatments in recurrent disease, with very few data regarding the use and response to target therapy.

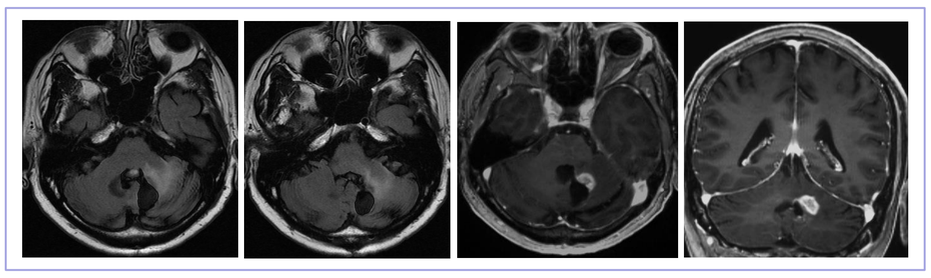
Case Report

We describe the case of a 62 year-old man who presented with left side ataxia and hyposthenia, nystagmus, headache, and an MRI feature of cystic-nodular enhancing left cerebellar mass with surrounding FLAIR hyperintensity limited to left cerebellar hemisphere.
An histopathological diagnosis of anaplastic pilocytic astrocytoma was made after gross total resection.



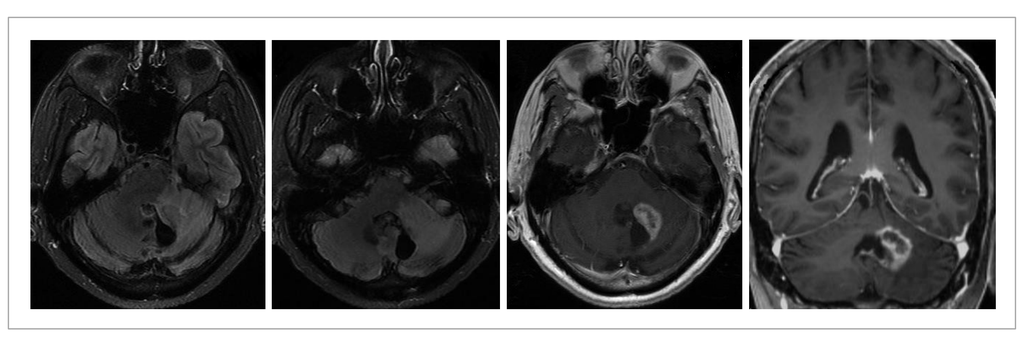
MRI at diagnosis

The patient underwent conformal radiotherapy with concomitant and adjuvant Temozolomide chemotherapy up to 20 cycles followed by a radiological evidence of disease progression.

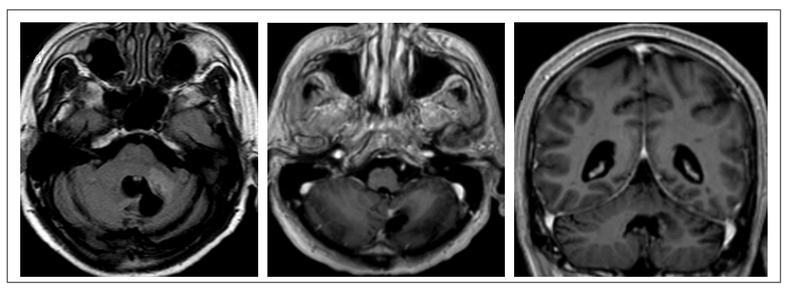


Recurrent disease was confirmed at a reoperation with a partial resection.

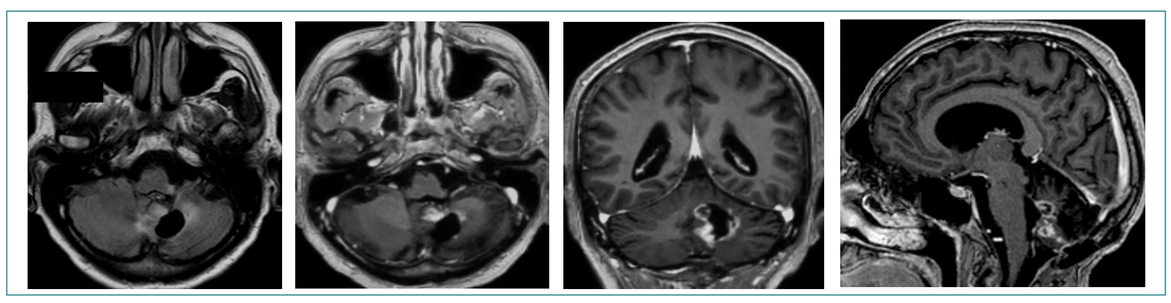
Adjuvant second line chemotherapy with CCNU and procarbazine was proposed with further disease progression after two cycles.
At that time, after 30 months from initial diagnosis, based on literature data suggesting a VEGF expression in PA, we proposed an off-label antiangiogenic therapy with Bevacizumab, a monoclonal antibody anti-VEGF.



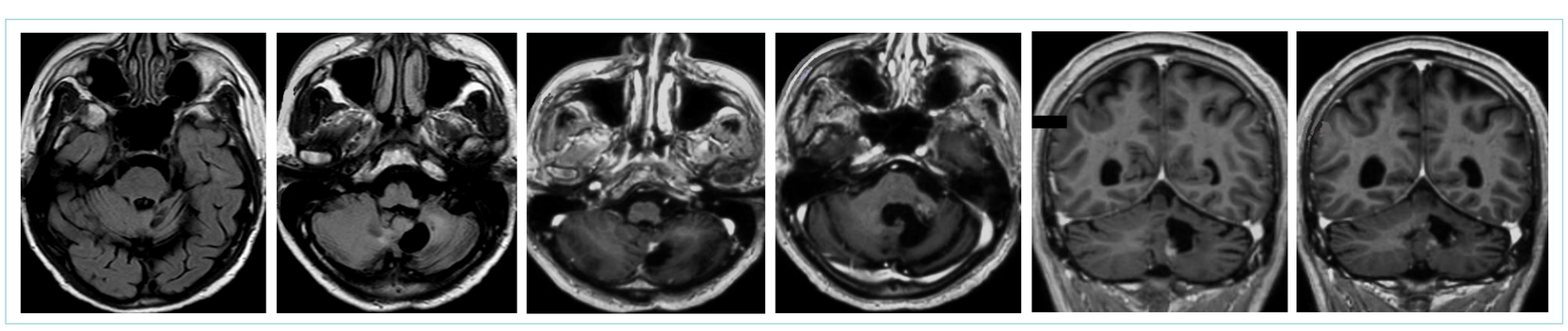
We observed after three infusions a near complete response (according to RANO criteria) in T1 with contrast MRI sequences and a partial response on FLAIR images, with stabilization of neurological symptoms. Radiological and clinical response were maintained long-time and therapy was interrupted after 8 months.



A disease progression was observed after 5 months of cessation of therapy, in the absence of new neurologic symptoms or signs.



Considering the good response and tolerability of bevacizumab, we performed a rechallenge of the antiangiogenic therapy with a new radiological response
(partial response in T1 with contrast, stable disease in FLAIR)
which is currently ongoing.



Conclusioni

Target therapies could in the future represent a new treatment option for anaplastic pilocytic astrocitomas.
Few data are available on response rate after rechallenge with bevacizumab in gliomas, but in this case a radiological and clinical benefit was obtained.

Bibliografia

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