Childhood onset craniopharyngioma

Childhood onset craniopharyngiomas are rare embryonic tumors of low-grade histological malignancy. Severe obesity, physical fatigue and psychosocial deficits due to hypothalamic tumor involvement have negative impact on quality of life. Initial pretreatment involvement of hypothalamic structures and/or treatment-related lesions result in sequelae clinically associated with impaired social and physical functionality and severe neuroendocrine deficiencies. Overall and progression-free survival rates are not associated with the degree of surgical resection. However, reduced overall survival rates were observed in patients with primary hypothalamic tumor involvement. Areas covered: This review discusses new perspectives on diagnostics, treatment and follow-up of patients with childhood-onset craniopharyngioma, which were mostly published after 2010 and presented at the 5th International Multidisciplinary Postgraduate Course on Childhood Craniopharyngioma, 19-22 April, 2018, at Bad Zwischenahn, Germany. Expert Commentary: Percutaneous radiooncological treatment options are effective in prevention of relapses and tumor progressions. Initial experience with proton beam therapy in childhood-onset craniopharyngioma patients shows promising results in terms of more protective radiological treatment. Recent reports on the molecular pathogenesis of craniopharyngioma open perspectives on the possibility of testing novel treatments targeting pathogenic pathways. As long as effective treatment options for hypothalamic syndrome are not available, hypothalamus-sparing treatment strategies are recommended [1)].

1)
Bogusz A, Müller HL. Childhood-onset craniopharyngioma: latest insights into pathology, diagnostics, treatment and follow-up. Expert Rev Neurother. 2018 Sep 26. doi: 10.1080/14737175.2018.1528874. [Epub ahead of print] PubMed PMID: 30257123.