World Academy of Science, Engineering and Technology International Journal of Mathematical and Computational Sciences Vol:14, No:12, 2020

Craniopharyngiomas: Surgical Techniques: The Combined Interhemispheric Sub-Commissural Translaminaterminalis Approach to Tumors in and Around the Third Ventricle: Neurological and Functional Outcome

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Abstract : Objective: Resection of large lesions growing into the third ventricle remains a demanding surgery, sometimes at risk of severe post-operative complications. Transcallosal and transcortical routes were considered as approaches of choice to access the third ventricle, however neurological consequences like memory loss have been reported. We report clinical results of the previously described combined interhemispheric sub-commissural translaminaterminalis approach (CISTA) for the resection of large lesions located in the third ventricle. Methods: Authors conducted a retrospective analysis on 10 patients, who were operated through the CISTA, for the resection of lesions growing into the third ventricle. Results: Total resection was achieved in all cases. Cognitive worsening occurred only in one case. No perioperative deaths were recorded and, at last follow-up, all patients were alive. One year after surgery 80% of patients had an excellent outcome with a KPS 100 and Glasgow Outcome score (GOS) Conclusion: The CISTA represents a safe and effective alternative to transcallosal and transcortical routes to resect lesions growing into the third ventricle. It allows for a multiangle trajectory to access the third ventricle with a wide working area free from critical neurovascular structures, without any section of the corpus callosum, the anterior commissure and the fornix.

Keywords: craniopharingioma, surgery, sub-commissural translaminaterminalis approach (CISTA), **Conference Title:** ICSRD 2020: International Conference on Scientific Research and Development

Conference Location : Chicago, United States **Conference Dates :** December 12-13, 2020