

Neuroendocrinology and Pituitary

NEUROENDOCRINOLOGY AND PITUITARY

Postoperative Quality of Life in Children and Adolescents with Craniopharyngioma - Results of the Prospective Multicenter Trial Kraniopharyngeom 2007

Maria Eveslage, Statistician¹, Gabriele Calaminus, MD², Monika Warmuth-Metz, MD³, Rolf-Dieter Kortmann, MD⁴, Fabian Pohl, MD⁵, Beate Timmermann, MD⁶, Martin U. Schuhmann, MD⁷, Joerg Flitsch, MD⁸, Andreas Faldum, MD¹, Hermann Lothar Muller, MD⁹.

¹Institute of Biostatistics and Clinical Research, University of Münster, Münster, Germany, ²Department of Pediatric Oncology, University Children's Hospital, Bonn, Germany, ³Department of Neuroradiology, University Hospital Würzburg, Würzburg, Germany, ⁴Department of Radiooncology, University Hospital Leipzig, Leipzig, Germany, ⁵Department of Radiooncology, University Hospital, Regensburg, REgensburg, Germany, ⁶Westdeutsche Protonenzentrum Essen (WPE), University of Essen, Essen, Germany, ⁷Department of Neurosurgery, University Hospital, Tübingne, Tübingen, Germany, ⁸Department of Neurosurgery, UKE, University of Hamburg, Hamburg, Germany, ⁹University Children's Hospital, Klinikum Oldenburg, Oldenburg, Germany.

MON-291

Background: Craniopharyngioma is an embryonic tumor of low-grade malignancy. Children and adolescents with this diagnosis are analyzed concerning quality of life (QoL) and (progression-free) survival within the project KRANIOPHARYNGEOM 2007.

Methods: The prospective, multi-center project consists of a randomized, unblinded substudy with adaptive design and an observational study. The randomized substudy for incompletely resected patients compares direct postsurgical radiation with radiation at progression. Endpoint is self-assessment of QoL measured by PEDQOL. In explorative analyses, the influence of additional factors was analyzed using linear mixed models.

Results: In the interim analysis of the randomized substudy according to the intention-to-treat approach only marginal differences concerning QoL between the two treatment groups were observed (n=24). The explorative analyses (n=131) show that ant-/ and posterior pre-operative hypothalamic involvement and postoperative hypothalamic lesions are associated with decreased QoL. After complete resection, the QoL is lower than with incomplete resection. Radiation, which is often performed due to progression after incomplete resection, is associated with reduced quality of life.

Conclusion: In order to achieve best QoL for children and adolescents with craniopharyngioma, hypothalamus-sparing therapeutic approaches are recommended. Based on the current data, it is not possible to recommend the optimal time for radiotherapy after incomplete resection with regard to QoL.

Diabetes Mellitus and Glucose Metabolism

DIABETES COMPLICATIONS II

Prevalence and Predictors of Diabetic Retinopathy Among Type 2 Diabetes Patients at a Tertiary Care Center

Khaled Ahmed Baagar, MRCP (UK), FACE¹, Fahmi Khan, MD¹, Mahmoud Zirie, MD, FACE¹, Sara Darwish, MD¹, Ahmed K A Mohammed, MD², Aaiza Aamer, MD³, Ahmed Shady, MD⁴, Amr Salama, MD⁵, Ahmed Hussein, MD⁶, Hussein Adly, MD⁷, Wajiha Gul, MBBS¹.

¹Hamad Medical Corporation, Doha, Qatar, ²Mount Sinai Hospital, New York, NY, USA, ³UPMC, Pittsburgh, PA, USA, ⁴Metropolitan Hospital Center, New York, NY, USA, ⁵Unity Hospital, Rochester, NY, USA, ⁶Morristown Medical Center, Morristown, NJ, USA, ⁷Ohaio State University Wexner Medical Center, COLUMBUS, OH, USA.

MON-667

Objective: Diabetic retinopathy (DR) is one of the most common microvascular complications of type 2 diabetes (T2D). The reported prevalence of DR from different populations in the last decade was 13 - 38.1%. A report from our center 17 years ago showed that DR prevalence was 43.6%. With the all accumulated evidence showing that diabetes control decreases DR risk and the introduction of new drugs that helped better T2D control, we aimed to assess the current prevalence and predictors of DR among patients with T2D attending out-patient department at our tertiary care center. **Methods:** We conducted a cross-sectional study involving 638 patients. We collected information about their baseline characteristics, confirmed DR with its severity and maculopathy diagnosis, age at T2D diagnosis, duration of T2D, and averages of HbA1C, blood pressure (BP), cholesterol, and vitamin D levels over the previous year. A statistical analysis was performed using the software SPSS 23.0. A multivariate logistic regression analysis examined the independent predictors of DR development. **Results:** The mean age of the patients was 55.8 ± 10.3 years, and 42.8% were males. The mean BMI was 32.4 ± 12.4 kg/m² with 58% had obesity. The mean duration of T2D was 11.5 ± 7.7 years, and the mean age at T2D diagnosis was 44.0 ± 9.98 years. The mean HbA1C was 8.3 ± 1.6 % with 77% had average HbA1C above 7% and 51.3% had average HbA1c above 8%. The mean systolic and diastolic BP were 136.37 ± 15.01 mmHg and 74.12 ± 8.078 mmHg, respectively. DR was diagnosed in 223 cases (35%). Of the 638 patients, 24.5% had non-proliferative DR, 9.2% had proliferative DR, and 4.2% had maculopathy. There was no significant difference in DR prevalence between males (36%) and females (34.1%) (P = 0.59). Predictors of DR development were age above 40 years, duration of T2D more than 10 years, early age of T2D diagnosis, average HbA1C more than 8%, and hypertension. **Discussion:** T2D is a major health challenge to our community with its very high prevalence. The prevalence of DR in T2D patients attending our institution was significant (more than one-third, 35%) in comparison to reports from other centers. However, we showed an improvement in DR development in our patients from 43.6% to 35%, probably due to better T2D and BP control. Similar to previous reports, T2D patients with older age, long T2D duration, younger age at T2D diagnosis, uncontrolled diabetes, and uncontrolled BP were more likely to develop DR. **Conclusion:** Physicians treating T2D patients should ensure regular retina screening especially for those with risk factors for DR. Also, they should fix the