in low- and middle-income countries already face delays and barriers to the treatment they require. The current COVID pandemic has added unique challenges to the delivery of complex, multidisciplinary health services to these patients. METHODOLOGY AND RESULTS: We retrospectively reviewed the records of four patients, ages 2-18 years old, with histologically confirmed high-grade glioma managed in a tertiary government institution from 2020-2021. Three of the patients had a supratentorial tumor and one patient had multiple tumors located in both supra- and infratentorial compartments. Neurosurgical procedures performed were: gross total excision (1), subtotal excision (2), and biopsy (1). The tissue diagnoses obtained were glioblastoma (3) and high-grade astrocytoma (1). Two patients survived and are currently undergoing adjuvant radiotherapy and chemotherapy. The remaining two patients expired: one from hospital-acquired pneumonia and the other from COVID-19 infection. DISCUSSION: Decreased mobility due to lockdowns, the burden of requiring negative COVID-19 results before admission for surgery, reduced hospital capacity to comply with physical distancing measures, the postponement of elective surgery to minimize COVID-19 transmission, physician and nursing shortages due to infection or mandatory isolation of staff, cancellation of face-to-face outpatient clinics, and hesitation among patients and their families to go to the hospital for fear of exposure were found to be common causes of delays in treatment. Also, the redirection of health resources and other government and hospital policies to handle the COVID-19 pandemic resulted in an overall delay in the delivery of health services. In particular, the management of pediatric patients with cancers, especially high-grade gliomas, was significantly disrupted.

HGG-58. SIOPE HGG WORKING GROUP APPROACH TO OBTAIN CONSENSUS ON MANAGEMENT OF PAEDIATRIC HIGH GRADE GLIOMA ACROSS EUROPE

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BACKGROUND: There is currently no European standard clinical practice on the management of paediatric HGG (pHGG). AIMS: To develop approved clinical recommendations for the management of pHGG reflecting current best practice, with the ultimate aim of improved outcomes. METHODS: An open questions survey was performed to establish the status quo regarding standards of care in pHGG across Europe. National coordinators from 33 countries were invited to participate in the process. RESULTS: 32 out of 33 countries completed the survey. Substantial areas of agreement were reached. All 32 countries agreed that hemispheric pHGG should be treated with radiotherapy and adjuvant chemotherapy after surgical resection. 30/32 (94%) countries proposed initial radiotherapy with concomitant temozolomide where 23/32 (72%) countries recommended a complementary adjuvant chemotherapy (Lomustine, Valproic acid, or Nivolumab). 32 countries agreed H3K27M diffuse midline glioma DMG, including DMG of the pons (DIPG), should be treated with radiotherapy. 10/32 (31%) countries proposed radiotherapy alone at diagnosis. There was no consensus on the role of adjuvant chemotherapy; temozolomide was recommended in 9/32 (28%), while mTOR inhibitor in 7/32 (22%) countries. A biopsy of DIPG was routinely offered in 18/32 (56%) countries, while in 4 countries was considered on an individual basis. Six countries never performed a biopsy. Re-irradiation at the relapse was consensual in 26/32 (81%) countries. Certain areas of divergence were identified. A Delphi method is being employed to reach a general consensus on those areas. CONCLUSION: This two-step approach will help us to set up the European guidelines on the management of pHGG based on the current best standard of care. This approach will also identify areas, which should be the focus of future collaborative studies. Such efforts will ultimately translate into improved patient outcomes.

HGG-59. PEDIATRIC HIGH-GRADE GLIOMAS AND THE WHO CLASSIFICATION ON CNS TUMORS - DIFFERENT PERSPECTIVES OF PEDIATRIC NEURO-ONCOLOGISTS AND NEUROPATHOLOGISTS IN THE LIGHT OF RECENT UPDATES

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BACKGROUND: The WHO Classification of Tumors of the Central Nervous System has undergone major restructuring following rapid advances in brain tumor genomics and epigenomics. The most significant changes resulted from the introduction of molecularly defined diagnostic criteria in 2016 (revised 4th edition). In 2021 (5th edition), further essential molecular criteria were incorporated. In the present study, we sought to investigate potential differences between specialists in perception of these newly defined molecular subtypes of pediatric high-grade gliomas (pedHGG). METHODS: We designed a 22-question survey studying the impact of the revised 4th edition of the WHO classification on pedHGG. Data were collected and statistically analyzed to capture the spectrum of viewpoints and possible differences among neuro-oncologists and neuropathologists. RESULTS: 465 participants from 53 countries responded, of which 187 pediatric neuro-oncologists (40%), 160 neuropathologists (34%) and 118 experts in other related fields (neurosurgeons, radiotherapists, neuroradiologists and others; 26%). Neuro-oncologists reported having issues with the introduction of new molecular entities, such as the abolishment and renaming of established tumor entities. Neuropathologists did not define these problems to the same extent. However, both groups felt that in the 2016 version, less relevant or insufficient diagnostic definitions were available for pedHGG. Within the 2021 WHO classification, a substantial improvement was perceived regarding the definition of pedHGG entities. However, some issues of high clinical relevance, like the definition of clinical phenotypes such as diffuse intrinsic pontine glioma (DIPG) and gliomatosis cerebri, are yet to be addressed. CONCLUSIONS: Within the WHO classification of pediatric brain tumors, such as high-grade gliomas, rapid changes in nomenclature have been introduced because of substantial improvement in molecular characterization. This study highlights that ongoing cross-talk between advancing classification of pedHGG subtypes and its biological relevance and clinical impact is essential.

HGG-60. STRUCTURAL VARIANTS SHAPE DRIVER COMBINATIONS AND OUTCOMES IN PEDIATRIC HIGH-GRADE GLIOMA

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Pediatric high-grade gliomas (pHGGs), encompassing hemispheric and diffuse midline gliomas (DMGs), remain a devastating disease. The last decade has revealed oncogenic drivers including single nucleotide variants