Histomorphological spectrum of lesions of the central nervous system including the brain, spinal cord and vertebrae

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Lesions of the central nervous system including the brain, spinal cord and vertebrae cause profound morbidity and mortality as they occur within the tight confines of the rigid cranium and vertebral column. They constitute both primary tumors and secondary tumors spread from tumors outside the central nervous system and also many infective and parasitic infections that may simulate space occupying lesions. This retrospective study analyzed the neurosurgical specimens that were sent to us by the only National Neurosurgical Referral Centre located in Bir Hospital in five years starting from January 2007 to December 2012. This study will give a broad prospective of the lesions and tumors of the central nervous system in our country during the study period. A retrospective evaluation of slides of 357 representative biopsy samples of five years duration was conducted and it constituted 2.23% of the total specimens received for histopathology. Out of these, 338 were lesions, 12 cases were of normal glial tissue and 7 cases were inadequate. In spite of suspicion of neoplasm in the brain it is not always possible to get the tumor tissue due to deep site of the lesion and poor general condition of the patient which allows only burr holing and minimal low yield of tumor mass. A slight male predominance was observed with the male to female ratio of 1.31:1. Neoplastic lesions comprised the majority of cases (82.0%) followed by non-neoplastic lesions (13.60%) and inflammatory lesions (4.43%). WHO grade-I neoplasm comprised 127 cases (45.84%) followed by grade-IV neoplasms 67 cases (24.18%), 48 cases (17.32%) of grade-II, 13 cases (4.69%) of grade-III neoplasms and 24 cases (8.66%) of all the neoplastic lesions comprised of neoplasms which were not categorized in any of the grades in the WHO classification. Out of the neoplasias, low-grade neoplasia and high-grade neoplasia comprised 42.58% and 20.60%, respectively. Low-grade neoplasms occurred in the 2nd to 4th decades of life and high-grade neoplasms occurred in the 4th to 6th decades of life. The lesions of the central nervous system including the brain, spine and vertebrae showed that neoplastic lesions comprised the majority of cases followed by non-neoplastic lesions and inflammatory lesions.

Giant cell angiofibroma of subglottis: Case report and review of literature

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Giant cell angiofibroma (CGAF) is a rare benign mesenchymal tumor which is frequently described in orbital region. Imaging studies has shown the tumor to be vascular and well circumscribed growth that mimics locally aggressive or malignant growth. Microscopically GCAF is a vascular tumor with intervening spindle cell proliferation and giant cells. CD-34 is used as an immune marker to aid in diagnosis of GCAF. We present the case of GCAF in 32 year old arising from cricoid cartilage in subglottic region. Clinically he was suspected to have a malignant growth. Following surgical excision and histopathological examination GCAF was diagnosed and further confirmed by immunohistochemistry. Follow up period was unremarkable. Several articles published in various journals were reviewed to assess the incidence of GCAF. It was concluded that the incidence of this tumor is rare. The common site reported was orbital region (39 cases). It is now recognized that this lesion presents in extraorbital sites such as oral cavity (3 cases), scalp (3 cases), inguinal region (3 cases), back (3 cases), vocal cord (2 cases), extremities (2 cases), mediastinum (1 case), retroperitoneum (1 case) and vulva (1 case). GCAF presenting in subglottic region is the first case to our knowledge.