Investigation of prognostic factors for eosinophilic chronic rhinosinusitis

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ABSTRACT

Background: Chronic rhinosinusitis (CRS) can be classified into CRS with nasal polyps (CRSwNP) and CRS without nasal polyps (CRSsNP). CRSwNP displays more intense eosinophilic infiltration and the presence of Th2 cytokines. In Japan, the objective clinical criteria of refractory eosinophilic CRS (ECRS) associated with severe symptom and multiple surgery required for recurrence has been established in 2015 (called the Japanese Epidemiologic Survey of Eosinophilic Chronic Rhinosinusitis study: JESREC study). But clinical course of this disease is variable. Thus, we wanted to determine the prognostic factors of ECRS based on preoperative clinical examination. **Method:** Forty-five patients diagnosed as ECRS who had undergone ESS in our hospital were evaluated for the retrospective study. The prognostic factors chosen were as follows: history of asthma, history of aspirin intolerance, peripheral eosinophilia, total IgE, house dust mite antibody, preoperative CT score, closure of olfactory fissure on CT, fraction of exhaled NO (FeNO), presence of olfactory disturbance, severity of ECRS based on JESREC algorithm, gender and age. **Result:** We performed discriminant analysis which is one of the multivariate analyses to predict a categorical dependent variable (called a grouping variable) by one or more continuous or binary independent variables (called predictor variables). The combination of severity of ECRS, peripheral eosinophilia, history of asthma and FeNO was the highest value of canonical correlation coefficient, an indicator showing the validity of the statics. But the combination of preoperative CT score, peripheral eosinophilia, history of asthma and FeNO was almost statistically equivalent to the former one. **Conclusion:** Our study demonstrated severity of ECRS (more than severe) and preoperative CT score (more than fifteen points) were the most important prognostic factors of ECRS. Surgeons should always be careful to the patients who had such a risk factor. Post-operative long-term follow-up is also essential.

Congenital intranasal glioma presenting as septal polyp

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ABSTRACT

Introduction: Congenital midline masses are rare anomalies. It occurs in 1:6000 live births among Asians and nasal glioma constitutes 5% of such lesions. Glioma is a misnomer as it is not a true neoplasm. It is made up of ectopic nerve tissue with neuroglial elements, glial cells within a connective tissue matrix either with or without connection to the subarachnoid space or dura. It can be divided into extranasal, intranasal or mixed lesions. 60% are extranasal; 30% are intranasal lying within the nasal cavity, mouth, or pterygopalatine fossa and 10% are mixed, dumbbell shaped lesion communicating through a defect of the nasal bones. We present a case of intranasal glioma that mimics as septal polyp. **Case Presentation:** A full term baby girl presented with left polypoidal nasal mass since birth. Rigid nasoendoscope examination revealed a soft, non-vascular mass from the caudal part of left nasal septum with right deviated nasal septum. Magnetic resonance imaging (MRI) revealed a hyperintense T2 weighted, hypointense T1 weighted soft tissue mass occupying the whole left nasal cavity with no intracranial communication seen. An endoscopic excision was performed under general anaesthesia with no peri or postoperative complications. Histopathology examination shows fragments of fibrous tissue and glial tissue (S100 positive), focally covered by respiratory and metaplastic squamous epithelium. The patient remains well without recurrence during follow up. **Conclusion:** Radiological imaging is a necessity to rule out any intracranial extension. Complete surgical excision remains as the mainstay of treatment and route of surgery depends on cases and surgical expertise available.