

**XXV National Congress of the "Società Polispecialistica Italiana dei Giovani Chirurghi"  
13-15 June 2013, Bari, Italy**

**ENDOSCOPIC ENDONASAL RESECTION OF CLIVAL LESIONS IN CHILDREN**

P. FRASSANITO\*, M. RIGANTE, L. MASSIMI, G. TAMBURRINI, M. CALDARELLI, G. PALUDETTI,  
C. DI ROCCO

*Neurochirurgia Pediatrica, Policlinico A. Gemelli, Università Cattolica del Sacro Cuore, Roma, Italia*  
*Otorinolaringoiatria, Policlinico A. Gemelli, Università Cattolica del Sacro Cuore, Roma, Italia*

**Objective:** Endoscopic endonasal surgery (EES) has gained popularity in the management of sellar pathology in adult and pediatric population. Experience in the resection of skull base lesions remains scant in children, due to the rarity of this pathology. We describe three children affected by rare lesions of the clivus.

**Methods:** A 6-year-old girl complained with headache for 4 months. A 5-year-old boy presented with right eye ptosis and strabismus after one-month history of asthenia, headache, nausea and irritability. A 17-year-old boy showed remittent palsy of the right 6<sup>th</sup> cranial nerve. MRI showed lesions centered on the clivus with variable size and involvement of the intracranial space. CT defined the degree of bony erosion.

**Results:** Tumors were resected with combined ENT-neurosurgical approach, consisting of bilateral endoscopic transnasal posterior ethmoidotomy and sphenoidotomy, in order to expose the superior third of the clivus. One case was complicated by intraoperative CSF leak, resolved by external spinal drainage. Postoperative course was uneventful. Pathology was consistent with: Langerhans cell histiocytosis, epithelioid sarcoma, and condrosarcoma (grade I), respectively. Careful metastatic workup did not reveal secondary localizations. Patients received adjuvant therapies according to their pathology.

**Conclusions:** EES is a safe and feasible approach for the management of clival pathology. In spite of anatomical limits secondary to the age, this approach may achieve optimal outcomes in the pediatric population. Although pathology of this region is highly variable in children, malignant neoplasms are relatively frequent according to our experience. EES allows the fast recovery of patients, necessary to early start the oncologic treatments.

---

**OLFACTORY FUNCTION BEFORE AND AFTER ENDOSCOPIC TRANSSPHEOIDAL SURGERY**

P.P. MATTOGNO\*, L. VARGIU, G. PASSALI, G. PALUDETTI, C. ANILE, G. MAIRA, F. DOGLIETTO,  
M. RIGANTE

*Istituto di Neurochirurgia, Policlinico Gemelli, Università Cattolica del Sacro Cuore, Roma, Italia*  
*Istituto di Otorinolaringoiatria, Policlinico Gemelli, Università Cattolica del Sacro Cuore, Roma, Italia*

**Objective:** The transsphenoidal endoscopic approach to the sellar region has become a widely adopted surgical procedure. Nasal complications and their incidence have been investigated, but just a few studies are available on olfactory disturbance examination. Considering that smell impairment implies a considerable loss in quality of life, surgical practice should aim at its preservation.

**Methods:** Thirty-three patients, who underwent transnasal transsphenoidal endoscopic approach in Our Department between 2008 and 2012, were prospectively enrolled and assessed by olfactometry ("Sniffin' Sticks" olfactory detection threshold test), before and after surgery, at the six months follow-up.

**Results:** Pre-operatively, acromegalic patients showed a decreased sense of smell in 8/9 patients (88,8%); a reduced olfactory function was noticed in 10/24 non acromegalic patients (41,6%), p-value: <0,05. The post-operative olfactory detection threshold test showed unchanged olfaction in 17 patients (51,5%), improved sense of smell in 7 (21,2%) and decreased in 9 (27,3%).

No statistically significant differences were found in relation to gender, previous surgery, time between surgery and retesting (performed at least 6 months after surgery and endoscopic assessment of nasal healing), as well as middle turbinectomy.

**Conclusions:** Rhinological recovery is typically rapid and relatively complete after transsphenoidal endoscopic surgery. The endoscopic endonasal transsphenoidal approach, despite the possible removal of structures containing olfactory epithelium, doesn't seem to affect significantly olfaction. Moreover, the correction of nasal septal crest or inferior turbinate decongestion do not improved or increased olfaction itself during the same procedure.

---

\* Presenting Author

XXV National Congress of the "Società Polispecialistica Italiana dei Giovani Chirurghi"  
13-15 June 2013, Bari, Italy

**SKULL METASTASIS FROM HEPATOCARCINOMA AFTER LIVER TRANSPLANTATION: CASE REPORT**

S. IODICE\*, P.A. CRUDELE, V. FANELLI, G.F. PAOLILLO, A. DE TOMMASI

*Dipartimento di Neurochirurgia, Università degli Studi di Bari "Aldo Moro", Azienda Ospedaliero-Universitaria  
Conorziale Policlinico di Bari, Bari, Italia*

**Objective:** Malignant tumors in transplanted patients may originate by: cancer transmitted by donors with undiagnosed tumors; tumors that arise *de novo* after the transplantation; relapse of malignant tumors treated prior to transplantation. Recently an increased incidence of malignant tumors in transplanted patients, probably caused by their extended survival rate and immunosuppressive therapy, has been demonstrated.

**Methods:** The authors present a case of a 49-year-old patient, with hepatic cirrhosis from HCV and hepatocellular carcinoma, who underwent a liver transplant. A year and five months after the transplantation the patient suffered persistent headache and presented a palpable mass in right temporo-parietal area. Brain MRI demonstrated a skull metastasis.

**Results:** The patient underwent craniotomy with total removal of the tumor and infiltrated dura mater as well as right sigmoides sinus. Histologic specimens confirmed a bone metastasis of hepatocarcinoma (3rd Edmonson degree). Brain MRI showed the total removal of metastasis. A five-years follow-up shows that the patient enjoys good health.

**Conclusions:** The cranial involvement due to hepatocarcinoma in patients with liver transplantation is to be considered a rare event. This study investigates pathogenetic hypotheses that may give rise to the onset of malignant tumors in transplanted patients. A review of skull metastases in transplanted patients reported in literature is further made.

---

\* Presenting Author