

EP-1079 [Miscellaneous » Others]

Strategic Plan for Management of Intracranial Arachnoid Cysts

Mohamed Ali Kassem¹, <u>Heba Elsayed Elsayed</u>¹, Amin Mohamed Sabry¹, Alaa Mazy Mazy²

(1) Department of Neurosurgery, Mansoura University, Mansoura, Egypt, (2) Department of Anathesia and Surgical Intensive Care, Mansoura University, Mansoura, Egypt

Background: Arachnoid cysts are intraarachnoid collections of cerebrospinal fluid, either simple or complex cysts. They are mainly congenital in origin. Open surgery with cyst excision, cyst fenestration, ventriculocystostomy, stereotactic aspiration and cyst peritoneal shunting are different treatment options that are advocated. Pure endoscopic treatment of arachnoid cysts provides a minimally invasive method, also endoscopic assisted microscopic techniques through mini craniotomy can provide a minimally invasive method for certain types of arachnoid cysts depending on their intracranial anatomical location.

Method: This study includes 50 cases of arachnoid cysts in different intracranial location, either supra or infra tentorial were operated using the endoscope alone as in cysts related to quadrigeminal cistern, or endoscopic assisted microscopic technique as in sylvian and posterior fossa cysts. Five cases were managed conservatively without surgical intervention.

Results: We have achieved accepted results with follow up to 7 years with low morbidity and no mortality in our series.

Conclusion: Endoscopic technique applied by experienced endoscopic neurosurgeons harbors a very low complication rate and results in very favorable long-term results, conservative treatment for certain types of arachnoid cysts should be considered.

Keywords: Endoscope, Endoscopic assisted microscopic, Arachnoid cysts, Minimally invasive techniques, Ventriculocystostomy

EP-1080 [Miscellaneous » Others]

Neuroendoscopy in Kuwait: Evolution, Current Status and Future Directions

Waleed A Azab

Department of Neurosurgery, Ibn Sina Hospital, Kuwait City, Kuwait

An overview of the development of neuroendoscopy in the neurosurgery department, Ibn Sina Hospital in Kuwait is presented, with an outline of difficulties and obstacles faced until the field has reached its current status. After a modest beginning few years ago, endoscopic skull base procedures, intraventricular neuroendoscopy and spinal endoscopy are being currently regularly performed in the department. The factors and solutions that helped us overcome these problems are also elaborated upon. Although neuroendoscopy is not per se a neurosurgical subspecialty, it is an area that requires special training on the side of neurosurgeons. Achieving an appropriate level of care for patients undergoing neuroendoscopic procedures necessitates these highly-trained neurosurgeons to collaborate together and with colleagues from other specialties in order to create team works geared towards treating such patients. Importantly, a multitude of essential facilities should be available in order to make such a pattern of practice possible. In our experience, this was made possible through continued efforts that have finally paid off and gradually led to a complete shift of the face of neuroendoscopic practice in our department. Our future endeavors aim at further development of neuroendoscopy in the department so as to create a center of excellence.

Keywords: Endoscopic endonasal surgery, History, Neuroendoscopy

EP-1082 [Miscellaneous » Others] Exceptional Location of an Arachnoid Cyst

Mourad Bouaziz, Sandra Feknous

Department of Neurosurgery Annaba, Faculty of Medicine, Annaba, Algeria

Bulbomedullary junction arachnoid cyst is an exceptional location. These benign cysts whose pathogenesis is not known, the congenital theory is often evoked. It is an arachnoid encystment filled with cerebrospinal fluid. Symptoms are produced by the mass effect of the cyst on surrounding structures. We report a case of bulbomedullary junction arachnoid cyst in a young man of 24 years; operated at the neurosurgery department of the University hospital of Annaba, benefiting a total removal. A male; aged 24 years, without a history individuals whose symptoms goes back 3 years before admission by neck pain, aggravated it a few months ago by the onset of headache and vomiting. Clinical data: a syndrome of intracranial hypertension, vertigo, weakness of all four limbs. The MRI objectived an intracranial expansive process of the bulbomedullary junction with compression of this part. This process appears hypointense T1 and FLAIR; hyper intense T2 thin wall not raised after contrast agent injection evoking an arachnoid cyst. The patient was operated; total removal of the cyst. The postoperative Evolution was good. The symptoms disappeared. Histological study confirms that it is an arachnoid cyst. Only a few cases of bulbo-medullary junction arachnoid cysts was rapported. Clinical conditions that can cause various neurotologic symptoms. The benefits and risks of surgical treatment should be discussed.

Keywords: Bulbo-medullary junction, Arachnoid cyst, Neurosurgery

EP-1083 [Miscellaneous » Others]

Investigation of the Factors Affecting Pain Intensity in Patients with Low Back and Neck Pain

Ayşe Ünal¹, <u>Yücel Doğruel</u>², Yelda Kıngır¹, Filiz Altuğ¹, Erdoğan Kavlak¹

(1) Pamukkale University, School of Physical Therapy and Rehabilitation, Denizli, Turkey, (2) Pamukkale University, Department of Neurosurgery, Denizli, Turkey

Background: This study was planned to investigate the factors affecting pain intensity in patients with both low back and neck pain.

Method: Seventy-nine (56 female; 23 male) patients with both low back and neck pain, who applied to Neurosurgery Outpatient Clinic in Pamukkale University between January 2016 and December 2016. Pain intensity and questions about factors affecting pain were saved together with demographic characteristics of patients. Visual Analog Scale was used to determine pain intensity.



Results: Mean age of patients was 46.27±14.95 years. Mean of pain intensity was 6.43±2.35 and pain duration 125.62±218.47 weeks. 53(67.1%) of patients was not working and 26(32.9%) was working regularly. 66 (83.5%) of patients do not have habit of exercise and 13(16.5%) of patients doing exercise regularly. 45(57%) of patients said their pain was constantly, 33(41.9%) of patients said their pain was rarely. 63(79.7%) of patient when working with computer, 62(78.5%) of patients when going downhill and 62(78.5%) of patients when working stated that an increase the pain intensity. Mostly, it was seen that walking, female gender and getting out of the bed are the factors that increase pain.

Discussion: It has been observed that the lack of regular exercise habits and not paying attention to ergonomic regulations during work increase the intensity of pain. Patients should be trained to gain exercise habits and explain ergonomic arrangements in the working environment.

Keywords: Affecting factors, Ergonomic arrangements, Exercise habits, Low back pain, Neck pain

EP-1084 [Neuroanatomy » Spinal and Peripheral Nerve] An Uncommon Case Mimicking Cervical Trauma: Os Odontoideum

Idiris Altun, Kasım Zafer Yüksel

Department of Neurosurgery, Kahramanmaras Sutcu Imam University Medical Faculty, Kahramanmaras, Turkey

Os odonteideum is a seperate odontoid process from the body of the axis. It is the most common anomaly of the odontoid process. The etiology of os odontoideum remains controversial, although there is emerging consensus on both traumatic etiology and a congenital source. Patients with this condition can be asymptomatic or present with a wide range of neurological dysfunctions. It may cause cervical instability, atlantoaxial dislocation and myelopathy. This anomaly can mimic Type I and II odontoid fractures. Accurate diagnosis is mandatory to prevent treatment failures. There is a role for conservative treatment of an asymptomatic incidentally found, radiologically stable, and non-compressive os odontoideum. However, surgical treatment has a definitive role in symptomatic cases. In this study, the case is presented of a 31 year-old male patient with neck pain who was diagnosed with incidental os odontoideum. The diagnosis of acute odontoid fracture was discarded in this case as the radiological findings were of a characteristic cortex with smooth contours, and there was no history of recent trauma, sclerosis or hypertrophy of the anterior tubercle of the atlas.

Keywords: Os odontoideum, Congenital, Cervical trauma, Cervical instability

EP-1085 [Neuroanatomy » Spinal and Peripheral Nerve]

Discovery of Taste Roseas of Reproductive Organs Stimulated by Seminal Fructose and Roles of Organic Sensation: Experimental Study

Mehmet Dumlu Aydin¹, Nazan Aydin²

(1) Department of Neurosurgery, Medical Faculty of Ataturk University, Erzurum Turkey, (2) Department of Psychiatry, Bakırköy Mental and Neurologic Disease Education and Research Hospital, Istanbul, Turkey.

The basic mechanism of orgasmic pleasure has not been elucidated, although there is a broad similarity between taste and orgasmic sensation. Taste buds of the tongue have been well described, and taste information has been established as an important regulator of food selection and nutrition. However, very little is known regarding how pleasure sensation is created and perceived in an orgasm. Thus, we investigated whether there were taste bud-like structures stimulated by seminal fructose in the male urethra and glans penis. To confirm this hypothesis, we histologically examined the urethral tissues of male rabbits. We discovered that the male urethra and glans penis contained many taste bud-like structures similar to the taste buds of the tongue. Interestingly, these taste bud-like structures of the tongue were detected in the intramural openings of the urethral lacunae and glandular surfaces. These structures have neuron-like appendages at the apical ends of rose buds in the wall of the urethra and glans. Moreover, each urethral plica contained some taste buds that were particularly more dense in the distal urethra and glans penis. We hypothesized that the pelvic autonomous nerves innervated both the urethral and glans taste buds and conveyed orgasmic sensation from the urethral taste buds to the taste information- computing centers in the brain. We postulated that urethral taste buds are stimulated by seminal fructose, and supplying nerves may play a predominant role in the creation of orgasmic sensation, which has not yet been well studied thus far (Our Book: Taste Rosea of Hedonia/Amazon.com).

Keywords: Taste rosea, Orgasm, Reproductive organs

EP-1086 [Neuroanatomy » Cranial] Surgical Anatomy of Orbit

<u>Ibrahima Berete</u>, Rachid Ammor, Meryem Himmiche, Mamadou Diallo, Ange Fortuné Gankpé, Mohammed Aggouri, Mohammed Benzagmout, Khalid Chakour, Mohammed El Faïz Chaoui Department of Neurosurgery, Laboratory of Anatomy of Sidi Mohammed Ben Abdallah University, Fez, Morocco

Background: The orbit is a pyramidal cavity with its base in front and its apex behind and is a potential site for pathological processes such as tumors and vascular malformations. Knowledge of orbit anatomy, nerves and vascularization is essential to perform accurate microsurgical procedures in this region.

Method: We performed the microdissection of orbital fascia, relationship between nerves and others orbital structures. Anatomy of orbit was studied in serial human cadaver head. And they were dissected with the aid of an operating Microscope.

Results: We dissected the orbital fascia from the wall and, nerves and blood vessels of the orbit, the origins of the orbital muscles was from its insertions. Using the same rationale, we was performed microdissection the structure of the eye. The eyeball is embedded in orbital fat but is separated from it by the fascial sheath of the eyeball. **Conclusion:** Complete comprehension of relationship between differents anatomical structures into the orbit, are prerequisites

Conclusion: Complete comprehension of relationship between differents anatomical structures into the orbit, are prerequisites to accomplishing approprite surgical planing and, ultimately, to completing successful exploration and removal of pathological lesions in this region.

Keywords: Anatomy, Orbit, Surgical, Tumors