66

A morphometric study on anatomical disposition of the renal hilar structures in adult human cadavers of Hadoti region

Rajiv Kumar Verma*, Pratima Jaiswal, Kunjbihari Rathore, William F. Masih

Govt. Medical College, Kota, India

Aims: To evaluate the anatomical disposition of the renal hilar structures in human cadavers of Hadoti region distribution brought at Govt. Medical College Kota, considering their antero–posterior.

Material and methods: 100 renal hilar of the isolated kidneys from cadavers of Hodoti region, who were observed for the branching patterns and the distributions of the renal hilar structures. The number of branches of the renal artery and the divisions of the renal vein in the pre-hilar region were noted, along with their pattern of arrangement with respect to the renal pelvis.

Results: In the present study on the pre-hilar region, we observed that the highest division of the renal artery was 8 and that the highest incidence was of 4 divisions of the renal artery in 30% cases. The highest number of venous divisions which was observed was 7. The highest incidence of 40% cases showed 2 divisions of the veins. Regarding the patterns of arrangement of these structures, we observed a higher incidence (50%) of the classical arrangement (V-A-P), as has been described in the standard text books of anatomy, which was followed by the A-V-P pattern (28%).

Conclusion: An anatomical knowledge on the possible variant topography of the renal hilar structures is of great importance when urological surgical sprocedures are performed.

Keywords: Renal anatomy, Renal hilum, Renal artery, Renal vein, Renal pelvis

Conflicts of interest

The authors have none to declare.

https://doi.org/10.1016/j.jasi.2018.06.220

67

Bilateral cryptorchidism–a case report

Sharma Karishma*, Singh Brijendra, M.S. Ansari, K.S. Ravi, Mishra Vivek

Department of Anatomy, AIIMS Rishikesh, India

Background: Cryptorchidism is a common malformation found in 30% of the premature babies and 3-5% of new born infants. It is a condition in which one or both the testes have not passed down the scrotal sac. It may be unilateral/bilateral. It is categorized as true undescended testes in which testes are present in the normal path of descent, and ectopic testes in which testes are present at abnormal site.

Objective: During our routine dissection in one of the male cadaver 50 years old, we have recognized a mass on the right & left side in inguinal region.

Method: During routine dissections of cadavers for undergraduate medical students in the Anatomy Department of AIIMS Rishikesh. We came across In a male cadaver, the right & left testis was found in the inguinal region. Later the same was dissected and confirmed it as an undescended testis.

Result: The descent of testis is a time dependent phenomenon and the etiology of the undescended testis is a multifactorial phenomenon. Early recognition and correction of this condition can prevent the future consequences like malignancy, infertility, hernia etc. The details of its incidence, clinical consequences and some treatment aspects were considered for our case discussion. Such occasional practical findings are virtually creating awareness regarding structural anomalies in basic learners.

Keywords: cryptorchidism, hernia, cadaver.

Conflicts of interest

The authors have none to declare.

https://doi.org/10.1016/j.jasi.2018.06.221

68

Rachischisis–a rare finding

R. AtchutaKumari*, M. SrihariBabu

Andhra Medical College, Visakhapatnam, Andhra Pradesh, India

Rachischisis is a developmental birth defect involving the neural tube. This anomaly occurs in utero when the posterior neuropore of the neural tube fails to close by 27th intrauterine day. As a consequence the vertebrae overlying the open portion of the spinal cord do not fully form and remain unfused and open, leaving the spinal cord exposed. Patients with Rachischisishave motor and sensory deficits, chronic infections and disturbances in bladder function.

This condition is incompatible with life and affected pregnancies often end in miscarriages and still births. Infants born alive with Rachischisis die soon after birth mostly.

A dead foetus was obtained from Obstetrics and Gynecology dept of King George Hospital, Visakhapatnam. This fetus has Rachischisis in its lower part of the back. In this condition the neural tube fails to close completely and is exposed to the surface. Incomplete closure of the neural tube which affects the spinal cord is known as myelocele. This anomaly is probably due to failure of induction of the notochordal processes to regulate the growth of the neural tube.

Conflicts of interest

The authors have none to declare.

https://doi.org/10.1016/j.jasi.2018.06.222

69

Meningo encephalocele

B. RadhaRamani*, D. Ashalatha

Andhra Medical College, Visakhapatnam, Andhra Pradesh, India

Introduction: Meningo encephalocele is characterized by sac of meninges, CSF and brain tissue, that extends through anossification defect in the bones of the skull. There are two main types of meningoencephalocele, which are named according to the location of the sac. The front ethmoidal type is located at the frontal and ethmoid bones while the occipital type is located at the occipital bone. The most frequently affected bone is a squamous part of occipital bone which may be partially or totally lacking. Occipital encephalocele is more common in females than males. The incidence of is approximately 1/12000 births.

Case report: During the dissection of fetuses (obtained from Obstetrics and Gynecology dept of King George Hospital, Visakhapatnam), we observed a 20–21 weeks female foetus, weighing 640 grams with crown rump length 19 cm. On Dissection, the foetus

was found to havea 8 × 6 cm size, soft, skin covered mass protruding through a 4 cm cranial defect in the occipital area.

Conclusion: Ultrasound during the first trimester of pregnancy helps to identify these cases early, which enables counselling the parents for taking wise decision regarding termination of pregnancy and reducing physical and psychological stress to the family.

Conflicts of interest

The authors have none to declare.

https://doi.org/10.1016/j.jasi.2018.06.223

70

Persistent Mullerian duct syndrome–a case report

Supriya Garapati*, M. Srinivas

ESIC Medical College, Sanath Nagar, Hyderabad, Telangana, India

Introduction: Persistent Mullerian duct syndrome (PMDS) is a rare autosomal recessive disorder which could present as male pseudohermaphroditism [DSD] in which Mullerian duct derivatives are seen in a male patient. This syndrome is characterized by the persistence of Mullerian duct derivatives (i.e. uterus, cervix, fallopian tubes and upper two thirds of vagina) in a phenotypically and karyotypically male patient. The syndrome is caused either by an insufficient amount of Mullerian inhibiting factor (MIF????) or due to insensitivity of the target organ to MIF. Familial cases have been reported with a probability of sex-limited autosomal recessive or X-linked recessive inheritance. A review of the literature showed only few case reports from India including familial cases.

Aim of this study: The aim of presentation of this rare case of persistent mullerian duct syndrome is to outline management of such case when encountered unexpectedly while operating on inguinal hernia. More so this possibility should be kept in mind while operating on a case of cryptorchidism.

Case: We report our case a 28 yrs male patient who has presented with bilateral undescended testis with left sided Hydrocele. On laparotomy, he was found to have uterus and fallopian tubes and upper part of vagina (Mullarian duct derivatives), round ligaments and bilateral gonads (testis) in the abdomen. Testicular biopsy showed sertoli cell only syndrome with no evidence of malignancy. Semen analysis showed azoospermia. The facts about this rare interesting case of Persistant Mullarian Duct Syndrome will be discussed in detail at the conference.

Conclusion: This is a rare presentation of persistent mullarian duct syndrome reported few and far in literature. The surgeon operating on inguinal hernia in a cryptorchid patient, need to be aware of management of this condition, when encountered in an emergency situation. The future fertility of the patient need to be kept in mind and counselling before performing the definitive surgery is essential to prevent future litigation.

Conflicts of interest

The authors have none to declare.

https://doi.org/10.1016/j.jasi.2018.06.224

71

Bilateral carotico-clinoid foramen in adult human cadaver and its surgical implications—a case report

Haldar Arpan*, Tirpude Amit, Gaikwad Manisha, Chakraborty Soumya, Banerjee Provas, Basu Dipti

Department of Anatomy, All India Institute of Medical Sciences, Bhubaneswar, India

Objectives: This study aims to provide a guide to the detailed anatomy of carotico-clinoid foramen and its content can increase the success of diagnostic evaluation and skull based surgical approach by neurosurgeons. The ossified carotico-clinoid ligament is anatomically important due to its relations with the cavernous sinus and its contents, sphenoid sinus and pituitary gland. The existence of a bony compression, tightening or stretching of the internal carotid artery, causing induced headache in patients. It may also cause several endocrinological problems being located very close to hypophysis.

Methods: During routine osteology teaching for the undergraduates in the Department of Anatomy, ESI-PGIMSR, Joka, Kolkata, it was noticed in one dry skull of unknown age and sex that ossification reaches anterior and middle clinoid processes forming a bilateral foramen carotico-clinoidium. Digital Vernier calliper was used for the measurement of antero-posterior and transverse diameters of the foramen on both sides.

Results: On the right side, the anteroposterior diameter was 3.13 mm and transverse diameter was 5.01 mm. The corresponding values on left side were 4.23 mm and 5.52 mm. There was no fusion between anterior and posterior or between middle and posterior clinoid process on either side. The bilateral carotico-clinoid foramen which were circular in shape with smooth outline were located antero-lateral to sella turcica, medial to superior orbital fissure and behind the optic nerve on both sides. The length of the bony bar between the anterior and middle clinoid process was 2.1 mm on left side and 2.8 mm on right side.

Conclusion: Surgical removal of the anterior clinoid processes in ophthalmic segment aneurysms of Internal carotid artery, carotico-clinoid fistula and tumours like tuberculum sells meningiomas located in the para-clinoid region and cavernous sinus is more difficult when the carotico-clinoid ligament is ossified due to established neural and vascular relationships (oculomotor, trochlear, abductor, ophthalmic and mandibular nerves, internal carotid artery, cavernous sinus and coronary sinus) as drilling of anterior clinoid process may also cause inadvertent injury to optic nerve. This study can also help to evaluate pneumatisation of the anterior clinoid process preoperatively with computed tomography and carotid angiograms to avoid complications such as rhinorrhoea and pneumocephalus because in 60% of anterior clinoid processes are pierced by narrow venous canals arising from the cavernous sinus and traversing through the clinoid space and are a potential source of bleeding during removal of the anterior clinoid process.

Conflicts of interest

The authors have none to declare.

https://doi.org/10.1016/j.jasi.2018.06.225