

aberration and increased micronuclei frequency in the grossly normal appearing oral mucosa of high risk tobacco chewers patients.

Conflicts of interest

The authors have none to declare.

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Study of DNA damage in non-targeted chemosensitive peripheral blood leukocytes in breast cancer by Comet assay



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Background: Chemotherapy is often used to treat breast cancer; drugs can cause various side effects. Single-cell gel electrophoresis assay or comet assay is a sensitive and rapid method for DNA strand breaks in blood leukocytes; it provides information on amount of damage among individual cells.

Aim and objectives: We aimed to analyse the leukocytes DNA damage from non-targeted chemosensitive peripheral blood leukocytes in breast cancer by single cell gel electrophoresis assay.

Methodology: The peripheral blood samples from 60 breast cancer patients (30 before chemotherapy and 30 after chemotherapy) of age group 40–70 yr were collected during 2015–2016 under sterile conditions in heparinised tubes used for Leukocytes culture and 30 healthy non-cancerous females of same age group were taken as control. The informed consent was obtained. The comet assay conducted using three well OxiSelect™ Comet Assay Kit and stained with vista green dye, the slides were analysed by using Olympus® BX 51 fluorescence microscope. The results were statistically analysed.

Result: Mean age of participants were 62.45 ± 3.18 (SD). Obtained comets were analysed by the CometScore 1.5 Software. The Comet score analysis shows that the mean % TDNA (Tail DNA) of comet in leukocytes after chemotherapy is found to be 87.94 ± 11.26 (SD) than 7.16 ± 3.18 (SD) mean % TDNA of comet of before chemotherapy while there is no significant damage in control group.

Conclusion: It can be conclude that the chemotherapy can damage DNA of the non-targeted peripheral blood leukocytes though chemotherapy applied to kill the cancerous cells only.

Conflicts of interest

The authors have none to declare.

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Anomalous origin of bilateral testicular arteries – an anatomical and developmental overview



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Anatomical knowledge of morphological anomalies of the gonadal arteries is very important from the clinical point of view. The origin and course of testicular arteries has to be identified carefully during various surgical procedures like renal transplant,

intra abdominal surgeries and even in orthopedic surgery like spine surgery. With the advent of new intra-abdominal therapeutic and diagnostic techniques the anatomy of Testicular arteries has assumed much more importance. In this case report a bilateral aberrant origin of testicular artery from polar artery is reported, carrying significance in operative as well as diagnostic fields.

Conflicts of interest

The authors have none to declare.

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5

Unilateral thyrolinguofacial trunk: an unusual anatomic variant: a case report



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Prior knowledge of arterial supply to the head and neck is of considerable importance; especially for the surgeries involving head and neck region. We are reporting unilateral right side thyrolinguofacial trunk; emerging as a branch from the anterior surface of the right external carotid artery giving of superior thyroid artery and a linguofacial trunk during a routine neck dissection. Linguofacial trunk then divided into lingual and facial artery. Vascular abnormalities can only be detected only during dissection of the cadaver or by the radiologists or accidentally during surgeries leading to haemorrhage.

Conflicts of interest

The authors have none to declare.

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6

Study of lip patterns in Vidarbha region of Maharashtra



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Background: Lips are two fleshy folds surrounding the oral orifice. The pattern of wrinkles on the lips has individual characteristics as fingerprints. Cheiloscopy (quiloscopy) can be defined as a method of identification of a person based on characteristics arrangement of lines appearing on the red part of a lip. It is a forensic investigation technique that deals with identification of human based on lip traces. Present study is aims to find out lip pattern common in Vidarbha region.

Materials and methods: Lip prints of 222 randomly selected subjects were obtained using dark coloured lipsticks, and cellophane tape. Lip prints were analysed using magnifying lens and classified according to the Yasuo Tsuchihashi classification.

Result: The examination of lip print patterns revealed that no two lip prints matched with each other, thus establishing the uniqueness of the lip prints. We have examined total of 444 lips in six different compartments, among these 152 were females and 70 were males. The most predominant pattern in the entire study population was Type II. In females, Type II lip pattern was most

commonly found followed by Type I and Type IV. In males, Type II lip pattern was predominant, followed by Type I and Type IV. So the most common lip pattern for both female and male is Type II. In male for upper lip the most common pattern is Type II and for lower lip is Type I. In female for upper lip the most common pattern is Type II and for lower lip is Type II. In UR compartment Type II lip prints is most common in both male and female.

Conclusion: From the result it can be conclude that the type II lip print is the most common type in Vidarbha region in both the male and female. Each lip print is different in different compartment.

Conflicts of interest

The authors have none to declare.

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A study of variations in the external morphology of gall bladder



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Introduction: Extrahepatic biliary apparatus comprises of gall bladder, cystic duct, hepatic ducts and CBD. Gall bladder flask shaped blind end diverticula which are situated in contact with the undersurface of right lobe of liver. In adult the length is between 7 cm and 10 cm with a capacity of up to 50 ml¹. The gall bladder is described as having a fundus, body and neck. The fundus lies at the lateral end of the body and usually projects below the inferior border of the liver to a variable length². There are a lot of variations in the anatomical structure of gall bladder and arrangements of ducts. Variations in shape, size of gall bladder has long been debated by abdominal surgeons². Variations in shape and size are not uncommon. The variations are frequent during imaging of gall bladder and during surgical procedures like laproscopy and cholecystectomy. Normally gall bladder is found in right upper quadrant but may be found rarely in retrodudenal, retropancreatic or within falciform ligament, intrahepatic or retroplaced (retrohepatic).

Material and method: The study was conducted on 50 gall bladder obtained from formalin fixed cadavers used for undergraduate students during a period of 2 years. After taking necessary permission from institutional ethical committee.

Results and variations will be discussed at the time of presentation.

Conflicts of interest

The authors have none to declare.

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8

Anomalous attachments of flexor digitorum longus and flexor accessorius



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The tendons of flexor digitorum longus (FDL) and flexor accessorius (FA) muscle are found in the second layer of sole. In a male cadaver with normal-appearing feet, the four tendons of the FDL had a normal anatomical course till their distal attachment on the plantar surface of the phalanges. However, there were two anomalous

attachments on the dorsal aspect of the tendons of the FDL. Firstly, in the midfoot, the tendon of the flexor hallucis (FHL) longus gave four slips that attached themselves to their respective slips of tendons of the FDL. Secondly, the FA was made of fleshy fibres arising predominantly from the lateral aspect of the calcaneum. In the right foot, the medial head of the FA was 2.2 cm long and 2.8 cm on the left and right sides, respectively. The tendon split into two at the distance of 3.4 cm from medial calcaneal tubercle. One slip, that was 3 cm long, was attached to the FDL tendon and another slip, that was 1.7 cm long, from the point of splitting of the FA tendon, fused with the extra tendinous slip that arose from the FHL. The same was also observed in the left sole. The proximal part of the FDL and FHL were normal in appearance and attachments. However, the knowledge of this anomaly may be of importance to a foot-surgeon.

Keywords: flexor accessorius, flexor digitorum longus, foot, muscles.

Conflicts of interest

The authors have none to declare.

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Mature cystic teratoma of mesentery: a case report and its embryological review



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A teratoma is a tumor with tissue or organ components resembling normal derivatives of more than one germ layer. Although the teratoma may be monodermal or polydermal (originating from one or more germ layers), its cells may differentiate in ways suggesting other germ layers. Mature mesenteric teratomas are very rare, histologically benign tumors. The clinical presentation of mesenteric teratoma is usually non-specific and varies according to tumor size and location.

We report a rare case of mature cystic teratoma of mesentery in a 5 month old female infant who was admitted in department of paediatric surgery, ESIC medical college and superspeciality hospital, Sanathnagar with swelling in the abdomen associated with vomiting for last one month. Clinical examination revealed a soft to firm, non tender, slightly mobile lump occupying right hypochondrium, right lumbar, and umbilical regions. Radiographic and histopathologic investigations were done and diagnosed as mature cystic teratoma of the mesentery. Exploratory laprotomy with excision of the teratoma (intoto) was done. Anatomical and embryological knowledge of this rare tumor is very important for surgeons to deal with these case.

Keywords: germ layers, mesentery, teratoma.

Conflicts of interest

The authors have none to declare.

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