

in postoperative period. Transaction of the esophagus and the vagus nerves is most preferably performed under the bifurcation of the trachea, after the vagus nerves give off bronchial branches. This prevents impairing lung function. Transection of the esophagus at this level simplifies identification of lymph nodes lying near the recurrent nerves without damaging them. The right recurrent laryngeal nerve is rarely injured during the esophageal mobilization because of its location in the region of the cervical pleura on the lower surface of the right subclavian artery, and because the nerve is well visualized under the pleura. Injury to the left recurrent laryngeal nerve which loops under the aortic arch often occurs in the groove at the junction of the trachea and esophagus.

Conclusions. We believe that dissection of the esophagus along its posterior wall, between it and the spine is the least injuring.

ANATOMICAL STUDY OF THE SUPERIOR HYPOGASTRIC PLEXUS FOR THE NERVE-SPARING SURGICAL PROCEDURES IN FEMALE PELVIS

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Key words: superior hypogastric plexus, nerve-sparing, lymphadenectomy, pelvis, anatomy

Background. Para-aortic and presacral lymphadenectomy is frequently performed in the surgical procedures of various gynecologic pelvic malignancies. Postoperative complications such as urinary, anorectal, and sexual dysfunction related to the injury of the superior hypogastric plexus (SHP) during lymphadenectomy have been reported.

Aim. The aim of this study was to document the frequency and positional variability of the SHP through gross dissection of fresh cadavers.

Material and Methods. Seven female cadavers were transected superior to the origin of the celiac trunk to prevent the SHP from pulling down with overlying peritoneum. The peritoneum in the lumbopelvic region was carefully removed to expose the SHP. A microscope with X2.5 magnification lenses was used during dissections. The degree of deviation and appearance of the SHP were observed and the distances of origin from aortic bifurcation and length with maximal width of the SHP were measured.

Results and Discussion. The plexiform-like SHP was found more frequently than single-cord appear-

ance. The SHP extended from the level of intervertebral disc between L4 and L5 below the aortic bifurcation through the sacral promontory in the lesser pelvis. The measurements of the SHP documented in this study are expected to be available in nerve-sparing gynecologic surgeries with minimal complications.

CLINICAL AND APPLIED ANATOMY OF THE LEFT CORONARY ARTERY VARIATION

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Key words: left coronary artery (lca), left anterior descending artery, clinical anatomy

Background. Coronary arteries play an important role in perfusion of the heart tissues. Variations or anomalies of coronary arteries may be asymptomatic, while some can be symptomatic and may even cause sudden death. Knowledge of coronary artery variations is important in diagnosing and treating cardiovascular diseases.

Aim. The aim is to describe variations of the LCA and its branching patterns.

Material and Methods. A total of 78 human hearts were dissected, examined and measured using 0.01 mm sensitive digital calipers.

Results and Discussion. The mean outer diameter of left coronary artery (LCA), left anterior descending (LAD) and circumflex artery (CA) was 4.34 ± 2.01 , 4.21 ± 0.28 and 2.73 ± 0.6 mm respectively. Whereas the mean length of LCA, LAD and CA was 10.2 ± 3.5 , 83.4 ± 17.8 and 44.6 ± 17.9 mm respectively. The main trunk of LCA bifurcated in 63 specimens (80.76%), trifurcated in 8 specimens (10.25%), quadrifurcated in 6 specimens (7.69%) and penta-furcated in 1 specimens (1.28%). Variation in the origin of coronary arteries and their branching pattern can pose difficulties in imaging by conventional catheters, and in the management of congenital and acquired heart diseases. Short LCA explains some failures of adequate coronary perfusion from aortic valve surgery, and it is also a risk factor in developing coronary atherosclerosis. In conclusion, the high degree of variability of the LCA and its branching patterns has anatomical, pathophysiological diagnostic and therapeutic implications.

Conclusions. Adequate knowledge of these variations is important for the interpretation of coronary angiography, stenting procedures and surgical myocardial revascularization.