# SPECIAL ARTICLE

Committee on Classification of Regional Lymph Nodes of Japan Society of Clinical Oncology

# **Classification of Regional Lymph Nodes in Japan**

Received: June 12, 2003

# Foreword

The first classification of regional lymph nodes was proposed in the "General Rules for Reporting on Clinical Oncology, Part V," in 1991, to integrate the nomenclature and coding based on individual General Rules for cancer research (in Japanese). However, the proposal became problematic because new codes in the proposal differed from traditional codes in the individual General Rules for cancer research.

During the following decade, much revision of the General Rules for cancer research took place. A new committee on classification of regional lymph nodes was appointed, in November 1997, to establish a new systematic classification by the Japan Society of Clinical Oncology, the core society for the treatment for cancer. The committee members were clinicians from 15 societies that had established the General Rules for cancer research and specialists in anatomy and pathology.

The committee determined that any codes were not employed. The systematic classification of regional lymph nodes was determined to be divided into four parts: 1) the neck, axillae, chest wall, and upper extremities; 2) the thorax; 3) the abdominal cavity (1 & 2); and 4) the pelvis, inguinal region, and lower extremities.

First, the committee discussed anatomically appropriate entries of regional lymph nodes for the systematic classification. These entries were considered to integrate clinical consistency in diagnosis and treatment of regional lymph

Committee on Classification of Regional Lymph Nodes of Japan Society of Clinical Oncology

Japan Society of Clinical Oncology

c/o Kinki Invention Center, 14 Kawara-cho, Yoshida, Sakyo-ku, Kyoto 606-8305, Japan

Tel. +81-75-751-7150; Fax +81-75-761-9724

e-mail: office@jsco.gr.jp

nodes. Clinically rare lymph nodes, although having anatomically appropriate entries, were omitted, and some subclassifications that were meaningless clinically were not employed. Then, new illustrations were employed in the present classification. Because it is difficult to represent three-dimensional images on a two-dimensional plane, these new illustrations were produced to be used in practice.

All editorial members, as well as the chief of the committee on classification of regional lymph nodes, Ryuichi Kudo, M.D., Ph.D., sincerely hope that this classification will be widely accepted, and that appropriate entries of regional lymph nodes in the systematic classification, such a common word, will be used in aspects of continuing cancer research and in practice in the diagnosis and treatment of cancer.

# **Classification of Regional Lymph Nodes**

- I. Lymph nodes in the neck, axillae, chest wall, and upper extremities
- 1. Parotid lymph nodes

Parotid lymph nodes can be classified into the following two groups according to their positional relationship to the parotid fascia.

a. Superficial parotid nodes

Superficial parotid nodes are located on the superficial lobe of the parotid gland and anterior to the auricula.

#### b.Deep parotid nodes

Deep parotid nodes can be subclassified as follows:

### •Infra-auricular parotid nodes

Infra-auricular parotid nodes are located on the surface of the lowest area of the parotid gland, which is surrounded by the anterior margin of the sternocleidomastoid muscle, the masseter muscle, and the cervical fascia.

The Japanese version of this article has been published in the *Classification of Regional Lymph Nodes*, Japan Society of Clinical Oncology (ed), Kanehara, Tokyo, 2002.

•Intraglandular parotid nodes

Intraglandular parotid nodes are located within the loose connective tissue between the superficial and deep lobes of the parotid gland.

- 2. Submental lymph nodes and submandibular lymph nodes
  - a. Submental lymph nodes

Submental lymph nodes are sandwiched between the platysma and mylohyoid muscles, and located in the area surrounded by the mandible, the hyoid bone, and the anterior belly of the digastric muscle.

# b.Submandibular lymph nodes

Submandibular lymph nodes are sandwiched between the platysma and mylohyoid muscles, and located in the (triangular) area surrounded by the mandible, and the anterior and posterior bellies of the digastric muscle.

3. Superficial cervical lymph nodes

Superficial cervical lymph nodes are located along the external jugular vein on the surface of the sternocleidomastoid muscle. These nodes can be classified as follows:

# a. Anterior superficial cervical nodes

Anterior superficial cervical nodes are located along the anterior jugular vein.

b. Lateral superficial cervical nodes

Lateral superficial cervical nodes are located along the external jugular vein, and can be found on the surface of the upper portion of the sternocleidomastoid muscle.

- 4. Anterior deep cervical lymph nodes
- A. Anterior group
- a. Prelaryngeal nodes

Prelaryngeal nodes are located on the surface of the cricothyroid membrane.

b. Thyroid nodes

Thyroid nodes are attached to the thyroid capsule, and can be classified as follows:

- •Prethyroid nodes
- •Parathyroid nodes
- c. Pretracheal nodes

Pretracheal nodes are located in front of the cervical trachea.

# d. Cervical paratracheal nodes

Cervical paratracheal nodes are located along the recurrent laryngeal nerve.

# B. Posterior group

a. Retropharyngeal nodes

Retropharyngeal nodes are located posterior and lateral to the pharynx.

# b.Paraesophageal nodes

Paraesophageal nodes are located along the cervical esophagus.

- 5. Lateral deep cervical lymph nodes
  - a. Superior deep cervical nodes (jugulodigastric nodes) Superior deep cervical nodes are located along the internal jugular vein, at the level of the posterior belly of the digastric muscle.
  - b.Middle deep cervical nodes (jugulo-omohyoid nodes) Middle deep cervical nodes are located along the internal jugular vein, at the level of the superior belly of the omohyoid muscle.

# c. Inferior deep cervical nodes

Inferior deep cervical nodes are located along the internal jugular vein, at the level of the inferior belly of the omohyoid muscle.

# d. Spinal accessory nodes

Spinal accessory nodes are located along the accessory nerve, and anterior to the anterior margin of the trapezius muscle. Because the highest nodes of this group are indistinguishable from the superior deep cervical nodes, they are simply classified as superior deep cervical nodes.

# e. Supraclavicular nodes (scalene nodes)

Supraclavicular nodes are located along the transverse cervical vein.

Lymph nodes in the lesser and greater supraclavicular fossae can be classified into medial and lateral groups. The medial group is termed the inferior deep cervical nodes, and the lateral group, the supraclavicular nodes.

# 6. Axillary lymph nodes

Axillary lymph nodes are classified according to the axillary blood vessels and their branches, as in the classification of lymph nodes in the digestive system.

# a. Brachial nodes

Brachial nodes are located along the axillary vein, and distal to the pectoralis minor muscle.

# b.Subscapular nodes (scapular nodes)

Subscapular nodes are located along the thoracodorsal blood vessels that are the continuation of the subscapular blood vessels.

# c. Pectoral nodes (external mammary nodes)

Pectoral nodes are located along the lateral thoracic blood vessels. These nodes can be classified as upper and lower groups. The lymph nodes of the upper group (sorgius nodes), deep to the pectoralis major muscle, are located between the second and third ribs. The lymph nodes of the lower group are located between the fourth and sixth ribs, and below the inferior-lateral margin of the pectoralis major muscle.

These nodes were formerly termed the external mammary nodes.

d. Central axillary nodes (superficial axillary nodes)

Central axillary nodes are located near the bottom of the axilla, and are crossed and/or adjacent to the intercostobrachial nerves.

e. Subpectoral nodes

Subpectoral nodes are located along the axillary vein, and posterior to the pectoralis minor muscle.

f. Interpectoral nodes

Interpectoral nodes are located between the pectoralis major and minor muscles, and along the pectoral branches of the thoracoacromial blood vessels, where the pectoral branches extend to the pectoralis major muscle.

g. Infraclavicular nodes (apical nodes)

Infraclavicular nodes are located along the axillary vein between the pectoralis minor muscle and the subclavius muscle, in the medial area where the thoracoacromial vein drains into the axillary vein. These nodes are located at the highest or the most medial margin of the axilla.

7. Parasternal lymph nodes

Parasternal lymph nodes are located along the internal thoracic blood vessels between the first and sixth ribs.

8. Epitrochlear lymph nodes

Epitrochlear lymph nodes are located along the basilic vein, and at the cubital-fossa side above the medial entepicondyle.

- II. Lymph nodes in the thorax
- 1. Supreme mediastinal lymph nodes

Supreme mediastinal lymph nodes are located from the imaginary line connecting the upper margin of the left and right subclavian arteries with the upper margin of the sternum, to the crossing point of the upper margin of the left brachiocephalic vein and the midline of the trachea.

2. Anterior mediastinal lymph nodes

Anterior mediastinal lymph nodes are located between the lowest supreme mediastinal lymph nodes and the diaphragm. Anterior to the trachea, these nodes are located along the aortic arch, superior vena cava, and brachiocephalic veins, and their anterior branches. In the lower boundary area, these nodes are located anterior to the pericardium.

3. Ligamentum arteriosum lymph node

Ligamentum arteriosum lymph nodes are located along the left margin of the ligamentum arteriosum, and below the aortic arch.

4. Ascending aortic lymph nodes

Ascending aortic lymph nodes are located on the lateral wall of the ascending aorta and the aortic arch, anterior to the vagus nerve.

5. Thoracic paratracheal lymph nodes

Thoracic paratracheal lymph nodes are located between the supreme mediastinal lymph nodes and tracheobronchial nodes. These nodes can be classified according to the areas anterior and lateral to the trachea, and divided into left and right groups.

# 6. Tracheobronchial lymph nodes

Tracheobronchial lymph nodes are located in the tracheobronchial angle. On the right side, these nodes are located medial to the azygos vein. On the left side, these nodes are located in the space between the aortic arch and left pulmonary artery, and medial to the ligamentum arteriosum. These nodes can be classified as right and left groups.

7. Inferior tracheobronchial lymph nodes (subcarinal lymph nodes)

Inferior tracheobronchial lymph nodes are located in the immediate proximity of the tracheal bifurcation.

8. Bronchopulmonary lymph nodes

Bronchopulmonary lymph nodes are located around the right and left bronchi. These nodes can be classified into the following groups.

•Main bronchus nodes (hilar nodes)

Main bronchus nodes, or hilar nodes, are located around the right and left principal bronchi.

•Interlobar nodes

Interlobar nodes are located along the lobar bronchi.

•Lobar nodes

Lobar nodes are located around the lobar bronchi.

•Segmental nodes

Segmental nodes are located along the segmental bronchi.

### •Subsegmental nodes

Subsegmental nodes are located along the subsegmental bronchi, and distal to the subsegments.

- 9. Paraesophageal lymph nodes Paraesophageal lymph nodes are located along the thoracic esophagus, and can be classified as upper, middle, and lower thoracic paraesophageal nodes.
- 10. Supradiaphragmatic lymph nodes

Supradiaphragmatic lymph nodes are located around the esophageal hiatus of the diaphragm, in the midback area of the diaphragm.

11. Posterior mediastinal lymph nodes

Posterior mediastinal lymph nodes are located in the posterior mediastinum below the supreme mediastinal lymph nodes, except for paraesophageal and supradiaphragmatic lymph nodes. These nodes can be classified as follows:

a. Pulmonary ligament nodes

Pulmonary ligament nodes are located within the pulmonary ligament and also posterior to and below the inferior pulmonary vein.

b. Thoracic duct nodes

Thoracic duct nodes are located along the thoracic duct.

- c. Thoracic para-aortic nodes Thoracic para-aortic nodes are located around the descending aorta.
- III. Lymph nodes in the abdominal cavity, No. 1
- 1. Paracardial lymph nodes

Paracardial lymph nodes are located around the cardia of the stomach, and they can be classified as follows:

a. Right paracardial nodes

The boundary, between the right cardial nodes and the lesser curvature lymph nodes, is the first branch of the ascending branch of the left gastric artery that enters the gastric wall. Lymph nodes located along the first branch can be classified as right paracardial nodes.

- b. Left paracardial nodes Left paracardial nodes are located along the cardioesophageal branch of the left inferior phrenic svein.
- Esophageal hiatus lymph nodes Esophageal hiatus lymph nodes are located in the esophageal hiatus.
- 3. Lesser curvature lymph nodes

The boundary, between the lesser curvature lymph nodes and the suprapyloric lymph nodes, is the first branch of the right gastric artery to the lesser curvature. Lymph nodes located along the first branch can be classified as suprapyloric lymph nodes. 4. Greater curvature lymph nodes

The boundary, between the greater curvature lymph nodes and the infrapyloric lymph nodes, is the first branch of the right gastroepiploic artery to the greater curvature. Lymph nodes located along this first branch can be classified as greater curvature lymph nodes.

5. Suprapyloric lymph nodes

Suprapyloric lymph nodes are located along the right gastric artery and its origin.

6. Infrapyloric lymph nodes

The boundary, between the infrapyloric lymph nodes and the superior mesenteric lymph nodes, is the confluence of the right gastroepiploic vein with the anterior inferior pancreaticoduodenal vein. Lymph nodes at the confluence can be classified as infrapyloric lymph nodes.

- Hepatoduodenal ligament lymph nodes Hepatoduodenal ligament lymph nodes are located within the hepatoduodenal ligament, which can be classified as follows:
- a. Hepatic artery nodes Hepatic artery nodes are located along the hepatic artery.
- b. Bile duct nodes Bile duct nodes are located along the bile duct.
- c. Cystic duct nodes Cystic duct nodes are located along the cystic duct.
- 8. Peripancreatic lymph nodes
- a. Anterior and posterior pancreaticoduodenal nodes Anterior and posterior pancreaticoduodenal nodes are located on the anterior and posterior surfaces of the pancreatic head, from the superior mesenteric artery and/or the portal vein to the medial margin of the duodenum. The upper and lower nodes can be divided at the level of the ampulla of Vater.
- b. Inferior pancreatic nodes

Inferior pancreatic nodes are located along the inferior margin of the pancreatic body and tail; these nodes do not include the splenic hilum lymph nodes or superior mesenteric lymph nodes.

9. Common hepatic artery lymph nodes

Common hepatic artery lymph nodes are located along the common hepatic artery between the origin of the splenic artery and that of the gastroduodenal artery. These nodes can be classified as follows:

a. Anterosuperior group

These nodes are located anterosuperior to the common hepatic artery.

- b. Posterior group These nodes are located posterior to the common hepatic artery.
- 10. Splenic hilum lymph nodes

The boundary, between the splenic hilum lymph nodes and the splenic artery lymph nodes, is the end of the pancreatic tail.

11. Splenic artery lymph nodes

Splenic artery lymph nodes are located along the splenic artery, and include the nodes posterior to the pancreas. These nodes can be classified as distal and proximal groups, according to the origin of the posterior gastric artery.

12. Left gastric artery lymph nodes

Left gastric artery lymph nodes are located along the left gastric artery, from the origin to the ascending branch of the left gastric artery.

13. Celiac artery lymph nodes

Celiac artery lymph nodes are located around the celiac trunk. These nodes, which are located immediately near the origins of the left gastric artery, the common hepatic artery, and the splenic artery, can be classified as celiac artery lymph nodes.

- 14. Infradiaphragmatic lymph nodes Infradiaphragmatic lymph nodes are located on the abdominal surface of the diaphragm.
- 15. Intestinal mesenteric lymph nodes Intestinal mesenteric lymph nodes are located in the area of the intestinal mesentery.
- 16. Epicolic and paracolic lymph nodes Epicolic lymph nodes are located on the colon wall, from the cecum to the sigmoid colon; those nodes along the marginal arteries can be classified as the paracolic lymph nodes.
- 17. Ileocolic artery lymph nodes Ileocolic artery lymph nodes are located along the ileocolic artery.
- Right colic artery lymph nodes Right colic artery lymph nodes are located along the right colic artery.
- 19. Middle colic artery lymph nodes Middle colic artery lymph nodes are located along the middle colic artery.
- 20. Superior mesenteric lymph nodes

Superior mesenteric lymph nodes surround the superior mesenteric blood vessels, from the origin of the superior mesenteric artery to that of the middle colic artery. 21. Left colic artery lymph nodes

Left colic artery lymph nodes are located along the left colic artery.

22. Sigmoid artery lymph nodes

Sigmoid artery lymph nodes are located along the first and second sigmoid arteries.

### 23. Inferior mesenteric artery lymph nodes

Inferior mesenteric artery lymph nodes are located along the inferior mesenteric artery, from the origin of the inferior mesenteric artery to that of the lowest sigmoid artery. These nodes can be classified as follows:

a. Inferior mesenteric trunk nodes

Inferior mesenteric trunk nodes are located along the inferior mesenteric artery, from the origin of the left colic artery to that of the lowest sigmoid artery.

### b. Inferior mesenteric root nodes

Inferior mesenteric root nodes are located along the inferior mesenteric artery, from the origin of the inferior mesenteric artery to that of the left colic artery.

- III. Lymph nodes in the abdominal cavity, No. 2
- 1. Abdominal para-aortic lymph nodes

Abdominal para-aortic lymph nodes surround the abdominal aorta and inferior vena cava, which can be classified into the following four groups, from cranial to caudal areas.

### •a1 group

Lymph nodes in the a1 group are located in the area of the aortic hiatus (about 4–5 cm in width, surrounded by the medial crus of the diaphragm). These nodes are located within the median arcuate ligament of the diaphragm.

### •a2 group

Lymph nodes in the a2 group are located in the area from the uppermost part of the origin of the celiac trunk to the lower margin of the left renal vein.

### •b1 group

Lymph nodes in the b1 group are located in the area from the lower margin of the left renal vein to the uppermost part of the origin of the inferior mesenteric artery.

### •b2 group

Lymph nodes in the b2 group are located in the area from the upper margin of the origin of the inferior mesenteric artery to the aortic bifurcation.

Lymph nodes in the cross-sectional circumference of the abdominal aorta and the inferior vena cava can be classified as follows:

- Preaortic nodes
- Lateroaortic nodes
- Retroaortic nodes
- Interaorticocaval nodes
- Precaval nodes
- Laterocaval nodes
- Retrocaval nodes
- 2. Renal lymph nodes

From the point of view of renal cancer, another classification has been employed.

a. Right renal lymph nodes

Right renal lymph nodes are located to the right of the median line of the abdominal aorta, from the origin of the celiac trunk to that of the inferior mesenteric artery.

b. Left renal lymph nodes

Left renal lymph nodes are located to the left of the median line of the abdominal aorta, from the origin of the celiac trunk to that of the inferior mesenteric artery.

- IV. Lymph nodes in the pelvis, inguinal region, and lower extremities
- 1. Subaortic lymph nodes

Subaortic lymph nodes are located immediately below the aortic bifurcation, and in the angle of the right and left common iliac arteries.

- 2. Median sacral lymph nodes Median sacral lymph nodes are located along the median sacral artery, and outside the mesorectum.
- 3. Lateral sacral lymph nodes

Lateral sacral lymph nodes are located along the lateral sacral artery, from the origin of the internal iliac artery to the second or third sacral foramen.

- Common iliac lymph nodes Common iliac lymph nodes are located along the common iliac blood vessels.
- External iliac lymph nodes External iliac lymph nodes are located below the origin of the external iliac blood vessels.
- 6. Suprafemoral lymph nodes

Suprafemoral lymph nodes are located along the external iliac blood vessels, to the area just above the inguinal ligament. These nodes can be classified into the lateral and medial groups relative to the external iliac blood vessels.

7. Internal iliac lymph nodes Internal iliac lymph nodes are located in the triangular area between the external and internal iliac blood vessels, and along the internal iliac blood vessels.

# 8. Obturator lymph nodes

Obturator lymph nodes are located dorsal to the external iliac blood vessels. These nodes surround the obturator nerve and blood vessels. Some nodes are also near the internal orifice of the obturator canal.

### 9. Parametrial lymph nodes

Parametrial lymph nodes are located in and/or around the cardinal ligament.

10. Pararectal lymph nodes

Pararectal lymph nodes are located along the superior rectal artery distal to the origin of the lowest sigmoid artery from the inferior mesenteric artery. These nodes are also located within the rectal fascia, as well as along the middle rectal artery medial to the pelvic plexus.

### 11. Inferior rectal lymph nodes

Inferior rectal lymph nodes are located along the inferior rectal artery in the ischiorectal fossa.

# 12. Middle rectal root lymph nodes

Middle rectal root lymph nodes are located along the middle rectal artery, from the origin of the internal iliac artery to the area lateral to the pelvic plexus.

13. Inguinal lymph nodes

Inguinal lymph nodes are located below the inguinal ligament. These nodes can be classified as follows:

a. Superficial inguinal nodes

Superficial inguinal nodes are located on the surface of the fascia lata.

b. Deep inguinal nodes

Deep inguinal nodes are located deep to the fascia lata.

14. Popliteal lymph nodes

Popliteal lymph nodes are located around the popliteal artery, within the rhomboid-shaped area surrounded by the femoral biceps, the semimembranous muscle, and the medial and lateral heads of the gastrocnemius muscle.

Acknowledgment This classification of regional lymph nodes is the result of a number of meetings of the Committee on Classification of Regional Lymph Nodes, and these meetings were organized and supported by representative members of individual cancer societies. Therefore, this classification of lymph nodes was approved by the individual cancer societies. Finally, the classification was recognized by the council meeting and the Board of Directors of the Japan Society of Clinical Oncology. We are also grateful to Mr. T. Kohga, a medical illustrator, for drawing new illustrations under the guidance of Dr. T. Sato.

### References

- Gray's anatomy of the human body, 30th American edn. Lea & Febiger, Philadelphia, 1985
- General rules for clinical studies on head and neck cancer, 3rd edn. Japan Society for Head and Neck Cancer, November 2001
- General rules for the description of thyroid cancer, 5th edn. The Japanese Society of Thyroid Surgery, March 1996
- General rules for clinical and pathological recording of breast cancer, 14th edn. The Japanese Breast Cancer Society, September 2000
- General rule for clinical and pathological record of lung cancer, 5th edn. The Japan Lung Cancer Society, October 1999
- Guidelines for the clinical and pathologic studies on carcinoma of the esophagus, 9th edn. Japanese Society for Esophageal Diseases, February 1999
- Japanese classification of gastric carcinoma, 13th edn. Japanese Gastric Cancer Association, June 1999
- The general rules for the clinical and pathological study of primary liver cancer, 4th edn. Liver Cancer Study Group of Japan, November 2000
- General rules for surgical and pathological studies on cancer of the biliary tract, 4th edn. Japanese Society of Biliary Surgery, September 1997
- General rules for the study of pancreatic cancer, 5th edn. Japan Pancreas Society, April 2002
- General rules for clinical and pathological studies on cancer of the colon, rectum and anus, 6th edn. Japanese Society for Cancer of the Colon and Rectum, November 1998
- General rule for clinical and pathological studies on renal cell carcinoma, 3rd edn. Japanese Urological Association, The Japanese Society of Pathology, and Japan Radiological Society, April 1999
- General rule for clinical and pathological studies on bladder cancer, 3rd edn. Japanese Urological Association and The Japanese Society of Pathology, November 2001

- General rule for clinical and pathological studies on prostate cancer, 3rd edn. Japanese Urological Association and The Japanese Society of Pathology, April 2001
- General rule for clinical and pathological studies on renal pelvic and ureteral cancer, 2nd edn. Japanese Urological Association and The Japanese Society of Pathology, October 2002
- General rule for clinical and pathological studies on testicular tumors, 2nd edn. Japanese Urological Association and The Japanese Society of Pathology, March 1997
- General rule for clinical and pathological studies on adrenal tumor, 1st edn. Japanese Urological Association and The Japanese Society of Pathology, April 1992
- The general rules for clinical and pathological management of uterine corpus cancer, 2nd edn. Japan Society of Obstetrics and Gynecology, The Japanese Society of Pathology, and Japan Radiological Society, March 1996
- The general rules for clinical and pathological management of uterine cervical cancer, 2nd edn. Japan Society of Obstetrics and Gynecology, The Japanese Society of Pathology, and Japan Radiological Society, October 1997
- The general rules for clinical management of ovarian tumours, 2nd edn. Japan Society of Obstetrics and Gynecology, August 1997
- The general rules for clinical and pathological management of trophoblastic disease, 2nd edn. Japan Society of Obstetrics and Gynecology and The Japanese Pathological Society, 1995
- General rules for clinical and pathological studies on malignant neoplasms of the skin, 1st edn. The Japanese Skin Cancer Society, June 2002
- General rules for reporting on clinical oncology. Japan Society for Cancer Therapy, 1991

(With the exception of *Gray's Anatomy*, all titles on this list were published in Japanese by Kanehara, Tokyo.)

# **Committee members of the Classification of Regional Lymph Nodes**

Chief of the Committee on Classification of Regional Lymph Nodes: Ryuichi Kudo, M.D., Ph.D., Sapporo Medical University

Editorial members: Head and neck		
Satoshi Ebihara Masato Fujii Akihiro Kaneko	The Japanese Society of Thyroid Surgery Japan Society for Head and Neck Cancer Japanese Ophthalmological Society	National Cancer Center Hospital East School of Medicine, Keio University National Cancer Center Hospital
Shinzaburou Noguchi	The Japanese Breast Cancer Society	Medicine
Atsumasa Uchida * Kunitoshi Yoshino	The Japanese Orthopaedic Association Japan Society for Head and Neck Cancer	Mie University Faculty of Medicine Osaka Medical Center for Cancer and Cardiovascular Diseases
* Eiichi Shiba	The Japanese Breast Cancer Society	Osaka University Graduate School of Medicine
Thorax		
Tomoyuki Goya	The Japan Lung Cancer Society	Kyorin University School of Medicine
Hiroyasu Makuuchi	The Japan Esophageal Society	School of Medicine, Tokai University
Hiroyuki Kuwano Shunsuke Haga	The Japanese Breast Cancer Society	Tokyo Women's Medical University Daini Hospital
* You Watanabe	The Japan Lung Cancer Society	Kanazawa University School of Medical Science
Upper abdominal cavity		
Michio Kaminishi	Japanese Gastric Cancer Association	Graduate School of Medicine, The University of Tokyo
Masatoshi Makuuchi	Liver Cancer Study Group of Japan	Graduate School of Medicine, The University of Tokyo
Yoshifumi Kawarada Yuji Nimura	Japan Pancreas Society Japanese Society of Biliary Surgery	Ueno Municipal Hospital Nagoya University Graduate School of Medicine
* Takashi Aikou	Japanese Gastric Cancer Association	Faculty of Medicine, Kagoshima University
* Seiki Tashiro	Japanese Society of Biliary Surgery	School of Medicine, The University of Tokushima
Lower abdominal cavity		
Susumu Kodaira	Japanese Society for Cancer of the Colon and Rectum	Teikyo University School of Medicine
Naoki Tsukamoto	Japan Society of Obstetrics and Gynecology	National Kyushu Cancer Center
Hideyuki Akaza	Japanese Urological Association	University of Tsukuba, School of Medicine
Anatomy		
Tatsuo Sato	The Japanese Association of Anatomists	Graduate School, Tokyo Medical and Dental University
Akio Yanagisawa	The Japanese Society of Pathology	Japanese Foundation for Cancer Research
Coordinator Satoru Sagae	Japan Society of Obstetrics and Gynecology	Sapporo Medical University

\* Term as editorial members: December 1997–January 2000



Fig. 1. View of blood vessels and visceral organs (female)



Fig. 2. View of blood vessels and visceral organs (male)





Fig. 3. Superficial lymph nodes of the neck



Fig. 4. Deep lymph nodes of the neck



Fig. 5. Lymph nodes around the thyroid gland and cervical trachea



Fig. 6. Lymph nodes in the breast and axilla



Fig. 7. Levels of the axillary lymph nodes



Fig. 8. Lymph nodes in the mediastinum (superficial view)



Fig. 9. Lymph nodes in the mediastinum (deep view)



Fig. 10. Lymph nodes around the esophagus



Fig. 11. Groups of lymph nodes around the esophagus



Fig. 12. Lymph nodes around the stomach



Fig. 13. Lymph nodes around the abdominal aorta



Fig. 14. Lymph nodes around the pancreas and along the biliary tract (anterior view)



Fig. 15. Lymph nodes around the pancreas and along the biliary tract (posterior view)



Fig. 16. Lymph nodes around the colorectum



Fig. 17. Lymph nodes in the urogenital system (male)



Fig. 18. Lymph nodes in the pelvis (male)



Fig. 19. Lymph nodes in the urogenital system (female)



Fig. 20. Lymph nodes in the pelvis (female)