



Quiz

Scientific Session 5: USG Evaluation of Vascular AVF & Venous Disease

Lecture 2: Ultrasonography for AVF-related Complications in Japan

1. Which vessel do you measure blood flow of AVF?
① Shunt Vein ② Axillary Vein ③ **Brachial Artery** ④ Artery Just before AVF
2. What does high RI (resistance index) of the brachial artery mean?
① Excessive Blood Flow ② Low Cardiac Function ③ Stenosis in a Proximal Artery
④ **Increased Vascular Resistance**

Lecture 3: Iliac Vein Stenting for May-Thurner Syndrome with IVUS

1. What is most common cause of May Thurner' syndrome?
① **Left common iliac vein compression by right common iliac artery and vertebral body**
② Right common iliac vein compression by left common iliac artery and vertebral body
③ Inferior vena cava compression by right common iliac artery and vertebral body
④ Radiation of abdomen after radical hysterectomy
⑤ Direct tumor compression of left iliac vein

Quiz

Keynote Lecture: The Role of USG for Surgeon

Lecture 1. The Role of Intraoperative Ultrasound for a Liver Surgeon

1. What is the peculiarity of perflubutane as contrast media for ultrasound?
① Biliary enhancement ② Accumulating in the Kupffer cells of the liver
③ Contrast effect on normal B-mode ultrasound ④ Dedicated to children
2. Which surgical technique is IOUS indispensable for?
① Liver parenchymal transection ② Hepatic inflow occlusion
③ Anatomic resection of each Couinaud liver segment ④ Cholecystectomy

Lecture 2. Why Ultrasound Guided Liver Surgery Should Be Considered?

1. Are communicating veins useful when tumor detachment from the hepatic vein is suitable?
① No ② Yes ③ Communicating veins are useful in case of invasion of glissonian pedicles
2. Compression of hepatic veins at caval confluence has to be carried out for performing an anatomical segmentectomy?
① Yes ② No, it should be compressed the feeding glissonian pedicle
③ Compressing vessel has no relation with anatomical resections

Quiz

Scientific Session 6: Ultrasound for Surgeon in Primary Care Clinic

Lecture 1. Ultrasound for Hernia

- What is the more useful thing for the Ultrasound exam of the inguinal hernia?
 - NPO state
 - Using convex probe
 - Standing position**
 - Decubitus position
- Which is the more easy direction for the Ultrasound exam of the inguinal hernia?
 - from lateral to medial
 - from medial to lateral
 - from top to bottom
 - from bottom to top**

Lecture 2. Ultrasound for Appendicitis

- 다음 중에서 급성 충수염의 초음파 소견에 해당하지 않는 것은?
 - 압박되지 않는 충수전후직경이 7.0mm 이다.
 - 종대된 충수주위에 고에코의 지방침착이 동반되어 있다.
 - 충수내강에 후방음영을 동반한 고에코의 충수분석이 있다.
 - 충수내강에 반향음영을 동반한 고에코의 가스음영이 있다.**
- 다음 중에서 대장계실염의 초음파 소견이 아닌 것은?
 - 대장벽의부로 구형의 저에코성 돌출 병변 있음
 - 대장계실 주위의 대장벽 비후소견 있음
 - 대장계실 주위의 고에코성 지방침착소견이 없음.**
 - 대장계실 주위조직의 혈류신호의 증가소견 있음

Lecture 3: Endoanal Ultrasound: Which Place in the Management of Fecal Incontinence?

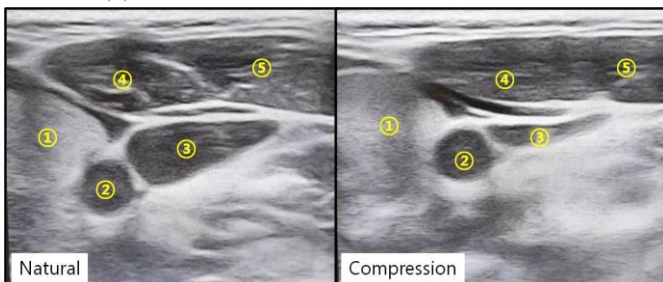
- When assessing patients with fecal incontinence with endoanal ultrasound?
 - The internal anal sphincter should be visualized as an hypoechoic ring**
 - The external anal sphincter should be visualized as and hypoechoic ring
 - The external sphincter is longer in female than in male, anteriorly
 - The anal canal is divided in four ultrasonographic levels of assessment

Lecture 4: Ultrasound for Acute Care

- 다음 중 Pneumothorax 환자에서 보이는 초음파 소견은?
 - Sea-Shore Sign
 - Sliding Sign
 - Barcode Sign**
 - Bat Sign
- 다음 중 Body Fluid 의 hydration 을 평가할 때 많이 사용하는 혈관은?
 - SVC
 - IVC**
 - Int. Jugular Vein
 - Femoral Vein

Lecture 5: Video Lecture - Sono Guided Vascular Access

- Following figures are ultrasonographic findings of right side neck. Which is the target structure for indwelling central venous catheter? (3)



- Which type catheter is the most vulnerable to catheter related blood stream infection?
 - Midline catheter
 - Implanted chemoport
 - Tunneled cuffed dialysis catheter
 - Peripherally inserted central catheter
 - Non-tunneled central venous catheter**



Quiz

Luncheon Symposium 2

Lecture 1. The Evolution of Minimally Invasive Breast Biopsy

1. Advantages of Vacuum Assisted Biopsy compared with open surgical biopsy?
 - ① Faster
 - ② Less invasive
 - ③ Provides constant visualization of the lesion
 - ④ All of the above
2. Which of the following is true?
 - ① Cytology provides a more complete diagnosis than histology
 - ② FNA is superior to Vacuum Assisted Biopsy
 - ③ U/S guided Vacuum Assisted Biopsy can excise lesions up to 8 cm's
 - ④ FNA is an excellent method for obtaining calcifications

Quiz

Plenary Session 2: Cutting Edge Technology of USG-Guided Ablation for Breast & Thyroid Tumors

Lecture 1. The Efficacy and Safety of RFA for Primary and Recurrent Thyroid Carcinoma

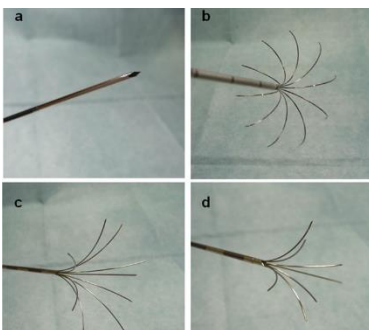
- What is the indication of RFA for recurrent thyroid cancers according to current Korean guideline?
 - Big recurrent tumor more than 2cm in largest diameter
 - Lateral neck metastasis in previous lobectomy patients
 - Inoperable patient**
 - Recurrent cancers more than 4 recurrent tumors
- What is the best way to avoid thermal damage to nerves during RFA for recurrent thyroid cancers according to current Korean guideline?
 - Hydrodissection technique**
 - Small amount of local anesthesia
 - General anesthesia
 - Fixed electrode technique

Lecture 2. Role of High Intensity Focused Ultrasound (HIFU) in Benign Thyroid Diseases

- Which of the following is not a recognized indication or inclusion criterion for high intensity focused ultrasound ablation of the thyroid gland?
 - A large (>4cm) benign thyroid nodule that is causing symptoms and patient does not want surgery
 - A benign thyroid nodule that measures between 9 – 30mm from the skin
 - A recurrent thyroid cyst that has failed to shrink after several needle aspirations**
 - A growing, benign thyroid nodule that is causing local symptoms and patient does not want surgery
- Which of the following sonographic sign represents the presence of microbubbles after high intensity focused ultrasound ablation?
 - Hypoechoic marks
 - Hyperechoic marks**
 - Ultrasonic cavitation
 - Reduced intranodular flow

Lecture 4: USG-Guided Thermal Ablation for Breast Cancer

- Which one is a good indication of RFA?
 - Tumors measuring up to 2cm**
 - Tumors with EIC (extensive intraductal component)
 - Invasive lobular carcinomas
 - Tumors with diffuse microcalcifications on mammography
- Which types of needles do we use in our RFA study?



- (a) Cool-tip™ RF ablation system** (Covidien, Boulder, CO, USA) is a straight needle design with trocar-style tips and internally circulates chilled water, cooling the tissue adjacent to the exposed electrode to maximize energy deposition and eliminate tissue charring.
- (b) LeVeen CoAccess electrode system** (Boston Scientific, Natick, MA, USA) is a coaxial system with an umbrella-shaped array-type electrode.
- (c, d) StarBurstXL RFA device** (AngioDynamics, Queensbury, NY, USA) is a multi-array needle electrode system with nine arrays plus active trocar tips and five thermocouples

Quiz

Scientific Session 7: Diagnosis of Breast Disease with USG

Lecture 1. USG-Guided VABB for Breast Microcalcificationa

1. Malignant potential of “Gouped microcalcifications”?
 ① 6~16% ② 16~36% ③ 26~46% ④ 36~56%
2. Innovative Ultrasound technique for detection and visualization of microcalcifications in Canon US system?
 ① Tissue Specific Optimization (TSO) ② uperb Microvascular Imaging (SMI) ③ Micropure ④ Shear Wave Elastography (SWE)

Lecture 2. Application of BI-RADS in Breast USG Interpretation by Less Experienced Physicians

1. Which of the following lesions should be classified as Category 4?
 ① Circumscribed, oval, solid mass with parallel orientation
 ② Microlobulated or oval masses composed entirely of clustered microcysts
 ③ Hyperechoic mass with central hypoechoic to anechoic components and surrounding edema
 ④ Oval masses composed of solid and cystic component
2. Which of the following is not a helpful way to improve the accuracy of breast ultrasound interpretation?
 ① Microcalcifications on mammogram
 ② Hardness on elastography
 ③ Biopsy for all the ultrasound detected lesions
 ④ Optical image quality

Lecture 3: Surveillance Ultrasound to Detect Breast Cancer Recurrence

1. What are the current surveillance recommendations for women with personal history of breast cancer?
 ① Annual mammography alone ② Physical examination and annual mammography
 ③ Annual mammography and breast ultrasonography ④ Annual mammography and breast magnetic resonance imaging (MRI)
2. Select one variable that is not a predictor of interval second breast cancers after surveillance mammography in women with a history of breast cancer.
 ① Age <40 at first breast cancer diagnosis ② Fatty breast on mammography
 ③ Grade of the first breast cancer ④ Treatment with breast conseration without radiation

Lecture 4: Technical Tips of USG-Guided Percutaneous Breast Biopsy to Reduce the False Negative Rate

1. 초음파 유도하 총생검의 장점으로 옳은 것은?
 ① 방사선 노출이 적다 ② 위양성 결과가 없다. ③ 바늘 굵을수록 검사의 정확도가 높다
 ④ 조직 검사 중 의사, 환자 모두에게 보다 편안한 방법이다.
2. 초음파에서 악성이 의심되는 소견을 보이는 경우, 초음파 유도하 CNB 의 적응증으로 가장 옳은 것은?
 ① 1 cm solid mass ② Image pathology discordant case ③ Non-mass-like lesion ④ Complex cystic and solid mass