

| Abdomen (AB) Tasks |
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| Anatomy and physiology 30% |
| Normal anatomy and physiology |
| Evaluate anatomic structures of the liver |
| Evaluate anatomic structures of the biliary system |
| Evaluate anatomic structures of the pancreas |
| Evaluate anatomic structures of the spleen |
| Evaluate anatomic structures of the urinary system (i.e., kidneys, ureters, bladder) |
| Evaluate anatomic structures of the peritoneal cavity |
| Evaluate anatomic structures of the retroperitoneum (e.g., great vessels and branches) |
| Evaluate anatomic structures of the scrotum and contents (e.g., testes, epididymides) |
| Evaluate anatomic structures of the penis |
| Evaluate anatomic structures of the prostate |
| Evaluate anatomic structures of the glands of the neck (i.e., thyroid, parathyroid, salivary) |
| Evaluate anatomic structures of the other superficial structures (e.g., subcutaneous) |
| Perfusion and function |
| Evaluate liver for function and/or perfusion |
| Evaluate biliary system for function and/or perfusion |
| Evaluate urinary system (i.e., kidneys, ureters, bladder) for function and/or perfusion |
| Evaluate retroperitoneum (e.g., great vessels and branches) for function and/or perfusion |
| Evaluate scrotum and contents (i.e., testes, epididymides) for function and/or perfusion |
| Evaluate glands of the neck (i.e., thyroid, parathyroid, salivary) for function and/or perfusion |
| Pathology 40% |
| Abnormal perfusion and function |
| Evaluate urinary system (i.e., kidneys, ureters, bladder) for vascular abnormalities (e.g., renal artery stenosis) |
| Evaluate retroperitoneum (e.g., great vessels and branches) for abnormalities (e.g., aneurysm, dissection, |
| thrombus) |
| Evaluate liver for transjugular intrahepatic portovenous shunt (TIPS) |
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| Evaluate liver for vascular abnormalities (e.g., Budd-Chiari, arteriovenous fistula, portal vein thrombosis, and |
| Evaluate liver for vascular abnormalities (e.g., Budd-Chiari, arteriovenous fistula, portal vein thrombosis, and collateralization) |
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| Evaluate urinary system (i.e., kidneys, ureters, bladder) for obstruction |
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| Evaluate urinary system (i.e., kidneys, ureters, bladder) for parenchymal disease |
| Evaluate peritoneal cavity for the presence of fluid |
| Evaluate joints for effusion |
| Evaluate superficial structures for foreign body |
| Evaluate superficial structures for infection |
| Evaluate superficial structures for masses |
| Evaluate breast for infection or abscess |
| Evaluate gastrointestinal (GI) system for herniation |
| Evaluate gastrointestinal (GI) system for inflammation (e.g., appendicitis, colitis) |
| Evaluate gastrointestinal (GI) system for obstruction (e.g., pyloric stenosis, intussusception) |
| Evaluate glands of the neck (i.e., thyroid, parathyroid, salivary) for diffuse parenchymal disease |
| Evaluate glands of the neck (i.e., thyroid, parathyroid, salivary) for inflammation |
| Evaluate glands of the neck (i.e., thyroid, parathyroid, salivary) for masses |
| Evaluate prostate for parenchymal disease or masses (e.g., benign prostatic hypertrophy) |
| Evaluate retroperitoneum for masses (e.g., fibrosis, lymphadenopathy) |
| Evaluate scrotum and contents (e.g., testes, epididymides) for fluid |
| Evaluate scrotum and contents (e.g., testes, epididymides) for herniation |
| Evaluate scrotum and contents (e.g., testes, epididymides) for masses |
| Evaluate scrotum and contents (e.g., testes, epididymides) for infection/inflammatory disease |
| Evaluate scrotum and contents (e.g., testes, epididymides) for parenchymal disease |
| Congenital anomalies |
| Recognize the presence of anatomic variants/congenital anomalies of the liver |
| Recognize the presence of anatomic variants/congenital anomalies of the biliary system |
| Recognize the presence of anatomic variants/congenital anomalies of the pancreas |
| Recognize the presence of anatomic variants/congenital anomalies of the spleen |
| Recognize the presence of anatomic variants/congenital anomalies of the urinary system (i.e., kidneys, |
| ureters, bladder) |
| Recognize the presence of anatomic variants/congenital anomalies of the retroperitoneum (e.g., great |
| vessels and branches) |
| Recognize the presence of anatomic variants/congenital anomalies of the scrotum and contents (e.g., testes, |
| epididymides) |
| Recognize the presence of anatomic variants/congenital anomalies of the glands of the neck (i.e., thyroid, |
| parathyroid, salivary) |
| Recognize the presence of anatomic variants/congenital anomalies of the other superficial structures (e.g., |
| subcutaneous) |
| Recognize the presence of anatomic variants/congenital anomalies of the infant hip |
| Evaluate ergan transplant for complications |
| Evaluate organ transplant for complications |
| Potient care 2% |
| Infection control |
| Maintain infection control |
| Practice universal precautions and good hygiene |
| Lise sterile technique when preparing for procedure |
| Integration of data 8% |
| Incorporate outside data (Clinical assessment, H & P. Lab values) |
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| Assess indications for examination requested |
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| Assess relevant clinical lab values for examination being performed |
| Assess relevant patient signs and symptoms for examination being performed |
| Correlate ultrasound findings with other imaging modalities |
| Protocols 3% |
| Clinical standards and guidelines |
| Inform patient or referring practitioner of examination preparations (e.g., fasting for biliary imaging) |
| Modify the examination based on sonographic findings |
| Use multiple patient positions and planes to evaluate anatomic structures |
| Measurement techniques |
| Measurement techniques |
| Obtain measurements of anatomic structures |
| Obtain measurements of blood flow velocities |
| Physics 10% |
| Artifacts |
| Assess artifacts of gray-scale imaging |
| Assess artifacts of color Doppler imaging |
| Assess artifacts of spectral Doppler imaging |
| Imaging instruments |
| Record images on a picture archiving and communication system (PACS) |
| Use 2-D, real-time, gray-scale imaging (B-mode) |
| Use color flow imaging |
| Use power Doppler |
| Use pulsed wave Doppler |
| Use harmonic imaging |
| Use curvilinear array transducer |
| Use linear array transducer |
| Use phased array transducer |
| Treatment 3% |
| Sonographer role in procedures |
| Assist in needle biopsy procedures |
| Obtain consent form and patient lab results prior to a procedure |
| Assist during and/or provide ultrasound guidance for procedures |
| Other 3% |
| Managing medical emergencies |
| Recognize findings that require immediate action |
| Traumatic injury |
| Identify abnormalities related to traumatic events |
| Identify urinary system (i.e., kidneys, ureters, bladder) abnormalities related to traumatic events |
| Identify scrotal and content (e.g., testes, epididymides) abnormalities related to traumatic events |
| Identify splenic abnormalities related to traumatic events |