Clinical Guide to Ultrasonography
by Charlotte Henningsen

Clinical Guide to Ultrasonography, a complete book dedicated to a wide audience of sonologists, surgeons, gynecologists, internists, residents, and practicing specialists, is well organized into five major parts: abdomen, gynecology, obstetrics, superficial structures, and miscellaneous (hip dysplasia, neonatal neurosonography, carotid artery disease, and leg pain).

Each chapter begins with an illustrated clinical scenario, showing specific circumstances that require ultrasound examination. Clear objectives are stated, followed by a glossary of terms. Subchapters are detailed and wonderfully illustrated; whenever necessary, tables are included that outline pathology, symptoms, and sonographic findings. A clear summary is presented and the clinical scenario is diagnosed and explained in detail. Every chapter ends with five cases to be solved; these cases often associate sonographic findings with tomographic images and ten clever study questions. The cases are explained and solved in the “Answers to Case Studies” chapter at the end of the book, followed by another special chapter: “Answers to Study Questions” for the ten-question groups. Each chapter is well referenced with recent citations.

The first section on the abdomen wonderfully describes 12 clinical entities in 12 chapters, including chapters on organs involved in right upper quadrant pain (gallbladder, biliary tract disease, or liver); liver mass; diffuse liver disease; epigastric pain: pancreatitis or pancreatic neoplasia, hemorrhia (urolithiasis, benign or malignant neoplasms); renal failure; cystic versus solid renal mass; splenic pathology generating left upper quadrant pain; and pediatric masses in the liver, kidney, or adrenal glands; etc. Chapters on pulsatile abdominal masses, gastrointestinal imaging, and the retroperitoneum are well done and informative. The abdomen section is well illustrated with clinical descriptions and clear and useful tables.

The second part nicely describes gynecologic pathology, in five chapters: causes of abnormal uterine bleeding, which includes a brilliant description of sonohysteroscopy and lost intrauterine device; the role of ultrasonography in diagnosis: extent and follow-up of pelvic inflammatory disease; infertility, and ovarian mass.

The third part nicely describes obstetrical pathology in nine chapters: uncertain last menstrual period; uterine size-greater-than dates; size-less-than dates; bleeding with pregnancy; multifetal gestation; causes of elevated alpha fetoprotein: neural tube defects, abdominal wall defects, amniotic band syndrome, and ectopia cordis—analyzed during prenatal screening projects; images required by genetic tests suggesting chromosomal anomalies; chromosomal anomalies especially trisomy 21, trisomy 18 and trisomy 13, fetal anomaly; and abnormal fetal echocardiography.

Superficial structures are clearly described in four chapters of the fourth section: breast mass, scrotal mass, neck mass, and the benign and malignant prostate. Finally, four different chapters cover miscellaneous diseases: hip dysplasia, neonatal neurosonography, carotid artery disease, and leg pain.

There are minor negative aspects, especially in the glossary parts, which describe pancreatic acini or islets of Langerhans as small cells, when in fact, they are glands. There also is a description of fatty liver disease as a replacement of normal hepatocytes by fat cells. In fact, fat accumulates inside the hepatocytes. The 24-page index is good and very detailed.

The Clinical Guide to Ultrasonography is filled with clear and concise tables, illustrations, drawings, and sonographic and tomographic images. Because of these 1100 high-quality illustrations, and 36 beautiful color Doppler and power images, clearly explained, and the intelligently organized and detailed text, reading this book is an easy and pleasant task. Readers will find it of frequent value in practice.

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