1. Record Nr. UNINA9910300085903321

Autore	Riccabona Michael
Titolo	Pediatric Ultrasound : Requisites and Applications / / by Michael Riccabona
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2014
ISBN	3-642-39156-7
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (451 p.)
Disciplina	610 616.07543 616.0757 616025
Soggetti	Radiology Pediatrics Emergency medicine Imaging / Radiology Ultrasound Emergency Medicine
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Basics: Physics of diagnostic ultrasound (US). US techniques. Artifacts. Biological effects of US. Practical US approach. Documentation and reporting. Future US methods. Basics of (Color) Doppler sonography -- Diagnostic flow charts, imaging algorithms, and graphs: Urinary tract diseases. Tumors and oncology. Abdomen. Systemic diseases. Graphs and illustrations for standardized measurements and volume calculations -- US investigations of various organs and systems: Pediatric cranial neurosonography. US of the neonatal spinal cord. Neck and facial/cervical glands. Chest US. Basics of pediatric and neonatal echocardiography. Abdominal US. Musculoskeletal and other small part US. US-guided interventions.
Sommario/riassunto	Ultrasound plays an important role in the diagnostic imaging of infants and children and has indeed become the workhorse for many conditions. This is attributable both to the avoidance of ionizing

radiation and to the unique features displayed on ultrasound in children in almost all body areas. In the future the potential of ultrasound can be expected to increase further owing to new developments such as ultrasound contrast material, three- or four-dimensional ultrasound, and ultrasound elastography. This book systematically covers the use of ultrasound in all organ systems and throughout childhood. After discussion of the basics, including physics, artifacts, and procedural details, decision making regarding the use of ultrasound is elucidated by listing next imaging steps based on recommended imaging algorithms. The indications and prerequisites for a particular examination are documented, and practical tips and tricks are highlighted. The normal, age-dependent ultrasound findings and typical appearances in different pathologies are presented in detail and illustrated by numerous high-quality images. Particular emphasis is placed on those findings that differ from the adult sonographic appearances. In addition to the classic pediatric abdominal applications, detailed consideration is given to neurosonography, echocardiography, chest ultrasound, musculoskeletal and hip ultrasound, Doppler sonography, and interventional ultrasound. The potential role of the most modern techniques in various situations is explained. Pediatric Ultrasound will prove an invaluable source of information and an indispensable aid to decision making and diagnosis for radiology residents, experienced (pediatric) radiologists, sonographers, pediatricians, pediatric surgeons and urologists, and all other physicians who deal with children as a part of their daily practice.