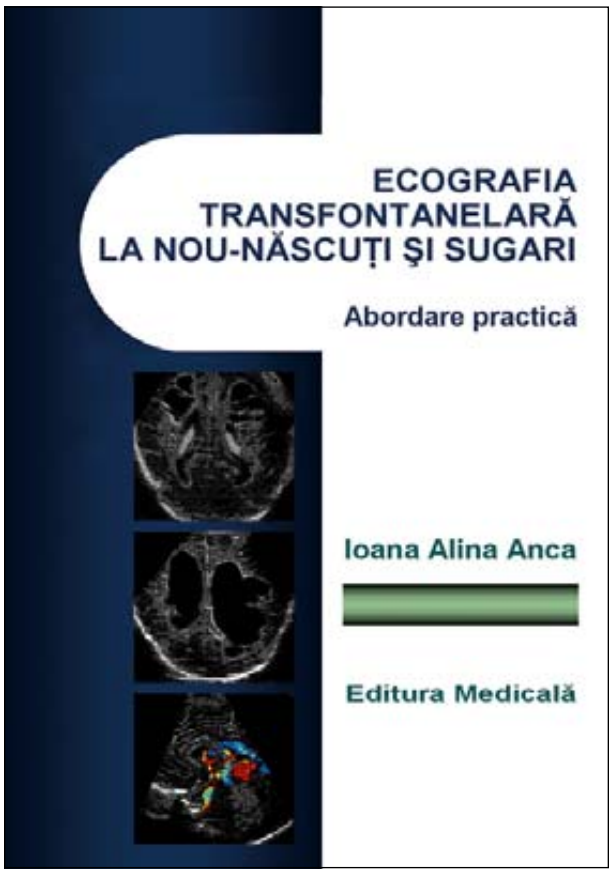
Book Review

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Ecografia transfontanelară la nou-născuți şi sugari Abordare practică

Ioana Alina Anca, Editor

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Professor Ioana Anca's book entitled *Brain ultrasound in neonates and infants – a practical approach* is the first work in the Romanian medical literature that addresses this issue. Professor Anca is a prestigious name in Romanian Pediatrics, and she was among the first doctors who performed the ultrasonography of newborn and infant brains in Romania. This examination has represented in the last two decades an indispensable investigation in all neonatology and pediatric departments.

The book is structured in nine chapters and succeeds in a relatively small number of pages (140) to present brain pathology in a very compact and systematic way which can be found in current practice in neonatology and pediatrics.

The practical approach idea is materialized in each chapter by presenting a medical case with clinical data and brief suggestive iconography, initially without specifying the ultrasonographic diagnosis. Therefore, actively the reader will try to process mentally the diagnosis and differential diagnosis of these cases before tackling each pathology. The book is useful both to the uninitiated, trying to decipher the mysteries of the ultrasound central nervous system and also for those with experience in this field. This work presents initially ultrasound techniques, the multiple acoustic windows used in neonates and infants brain ultrasonography, normal ultrasound aspects and Doppler interrogation aspects and then to review briefly the pathological aspects met in current practice.

Also impressive is the iconography, most images being part of the personal collection of the author. Each presented pathology is exemplified by conclusive ultrasound images, both from the pathology that we meet often, and also for the situations we face rarely or exceptionally. The author has not only presented ultrasound images, these were supplemented when required with the physical examination which revealed clinical aspects (the photos of patients), images obtained from complementary investigations and the image of the histo-pathology examinations. The first chapter presents the principles of ultrasound examination of the central nervous system of newborns and infants, some summary data regarding the anatomy and normal ultrasound appearance gained by scanning through various acoustic windows approaches: anterior and posterior fontanelle, transtemporal approach, mastoidian approach. The bidimensional examination is completed with Doppler query aspects. The brain ultra-

sound requires the assessment of the flow in cerebral vessels which is essential in obtaining accurate diagnoses in the pathology of the premature, newborn in term with asphyxia at birth, in brain malformations or in congenital or acquired infectious pathology. The next chapter presents premature pathology, where brain ultrasound plays a crucial role in the evaluation of ischemic or hemorrhagic lesions. The third chapter deals with a subject we meet frequently in current practice: lenticulostriate vasculopathy. The next chapter presents the ultrasound issues in cross intracranial congenital or acquired infections. As in the pathologies discussed above, ultrasound is the starting point to explore the imagery of brain infections. Chapter five reveals the importance of brain ultrasonography in the evaluation of the extraaxiale collections, a pathology also frequently met in practice.

Next, some aspects of ultrasonography in malformation pathology are offered. Ultrasonography is particularly important in the antenatal diagnosis of these situations, but also can guide diagnosis in postnatal care in many of these diseases. Sometimes, malformation issues are highlighted in complementary investigations such as magnetic resonance imaging. In chapter seven and eight, the author presents issues obtained by ultrasound or other imaging techniques common in destructive brain lesions and cerebral masses, predominant cystic, each pathology enjoying a highly suggestive iconography. The last chapter presents cerebral acute edema. Early diagnosis in this disease is essential in current practice. This book is very important for Romanian medicine because the ultrasound imaging method is the first choice in the assessment of hypoxic-ischemic and hemorrhagic lesions of the premature. We should also mention that cerebral artery Doppler ultrasound investigation is considered essential in evaluating the term newborn asphyxia in the first three days of life. Also the ultrasound role in the management of patients with brain infection or extraaxiale fluid collections must not be omitted. Often in our country, we do not have at hand magnetic resonance imaging or computed tomography in all pediatric centers, so ultrasound is essential in some of the cases as a correct approach, providing a prompt diagnosis.

I warmly recommend this book for all physicians in the pediatric or neonatology field.

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