Hydatidosis of the Central Nervous System: Diagnosis and Treatment
It gives me great honor to write a prelude to this important work undertaken by Assistant Professor Mehmet Turgut, in collaboration with several other well-known specialists in hydatid disease from all over the world.

This parasitosis is a devastating but curable worldwide calamity, with a cosmopolitan predominance. Unfortunately, it is mainly found in the less resourced regions of the world, namely, the Mediterranean, African, and South American countries.

Throughout my entire more than 40-year-long career as a pediatric radiologist and biophysicist, I have had numerous opportunities to be involved in the diagnosis, prevention, vaccination, and treatment programs against this dreaded illness.

My personal interest in hydatid disease dates back to my medical school days. I was born in Thala, a small village in the center of Tunisia, an intensive sheep-farming but heavily hydatidosis-infested endemic region. I vividly remember a young lad, Houcine, employed on my father’s farm, as shepherd, who presented with hemoptysis. I brought him to the small hospital in Thala where I did a chest conventional fluoroscopy, with a very old machine. I discovered that he had a large impressive opacity involving his entire right lung which turned out, at surgery, to be a pulmonary hydatid cyst (Hospital Ariana, Tunis).

Thanks to surgical and medical treatment, it is now 60 years after that incident but that lad, now an elderly man in his 80s, is still alive and enjoying perfect health.

That experience awakened a lifelong curiosity within me to do something about this devastating malady – a medical student dream.

On returning from Paris, as a recently graduated radiologist, biophysicist, and later on echographist, using my recently acquired skills in those fields, I straight away embarked on the hydatid disease fight.

I started diagnosing and mapping out the epidemiology of this illness and endeavored to find a remedy for it. I had the chance of collaborating with the greatest names of those days in radiology, parasitology, and gastroenterology fields in Tunisia, France, and Italy. Jointly we innovated a new strategy for treating hydatidosis. This involved the use of ultrasound to diagnose and guide a new mode of therapy which later came to be known as puncture-aspiration-injection-reaspiration (PAIR). This novel mode of staging was adopted by the World Health Organization and extended to other parasitic diseases, such as *Schistosoma haematobium* and *S. mansoni*. 
Ultrasound imaging modality and PAIR are rarely used in cerebral hydatidosis (orbit), but they should contribute effectively to the eradication of this calamity and ought to be included in the strategy for the diagnosis and the treatment of cerebral hydatidosis.

It gives me great pleasure to appraise this great multidisciplinary undertaking by Dr. Turgut and his colleagues: radiologists, neurologists, neurosurgeons, pathologists, veterinarians, surgeons, orthopedists, ophthalmologists, psychologists, parasitologists, internists, and biologists. This book no doubt adds to and complements the existing armament in the fight against hydatidosis, more especially the disease’s elusive cerebral location.

I am confident that this publication will be a great success and a landmark in the war against hydatidosis, eventually contributing to the ailment’s total annihilation. Together, through a global effort, we can fight this and many other tropical parasitic diseases.

I am sure that this book will not only be academically and professionally inspiring but also an enjoyable piece of reading.

Congratulations Assistant Professor Turgut for this noble task.

Tunis, Tunisia

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Preface

This book is designed to deliver succinct, up-to-date reference information to practicing physicians about imaging findings, differential diagnosis, pathology, clinical findings, and relevant surgical information of hydatidosis of central nervous system. Because of the fact that the problem is rare, no multidisciplinary information has been gathered from an exclusive source, although a significant amount of data is available on the care of patients with hydatidosis. The book is divided naturally into three major parts: the first section includes topics addressing epidemiological aspect of hydatidosis, the second section contains nonsurgical topics that affect decision-making in the patients, and the third section covers the topics on specific neurosurgical disorders. The relevant information given here is often very difficult for neurosurgeons to access elsewhere. The chapters in the book are written by authors who are world-renowned specialists in their respective fields of interest. The framework of each chapter has been designed according to their specific clinical and diagnostic considerations, but an identical format has been followed for all. It is believed that the information which is so crucial for the clinical neurosurgery practice is presented in this way. The detailed surgical information given in this book is intended to illustrate the basic techniques of the neurosurgical procedures and to give guidance which is expected to be useful for the execution of every operative approach. In fact, it should also give technical guidance to operations which are not specifically discussed. Apparently, all authors contributed to this book with their personal experience they have gained in their own institutions and with unusual images they have offered to illustrate each topic. At the end of each chapter, selected references are included for further review. I hope that the sections in which specific neurosurgical disorders are emphasized on an individual basis will prove helpful in surgical planning and in surgical management of patients for the individual neurosurgeon.

My particular thanks go to Dr. Inga von Behrens from Springer DE (Heidelberg, Germany) for his invaluable advice and support in the planning of the present book.

I would like to thank Professor Fuad Sami Haddad for his critical review and insightful supervision.
I owe thanks to my dear sons, Yaşar Barış and Ali Çağlar, for their devotion and constant support.

May I not forget Ms. Elise M. Paxson from Springer (New Jersey, USA) for her kindly assistance in the preparation of the figures for reproduction.

Aydın, Turkey

Mehmet Turgut, MD, PhD
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