Book Report

Growth Hormone Deficiency in Adults
By JOL Jorgensen and JS Christiansen

Published as part of the Frontiers of Hormone Research series, Growth Hormone Deficiency in Adults gives us ‘the state of art’ of clinical treatment with growth hormone (GH) in adults. The Editors are among the researchers that, 15 years ago, first described the clinical consequences of this pituitary hormonal deficit, neglected until then in the adult population, and showed the benefits of GH replacement. In the first chapter of the book, they offer the reader a very comprehensive overview of the clinical aspects of GH deficiency in the adult population (AGHD). Subsequent chapters, all written by authors with great expertise in the field, cover in depth not only all the classical topics related to GH deficiency (GHD) such as body composition, bone mass, skeletal and cardiac muscles, intermediary metabolism, fluid homeostasis and quality of life, but also epidemiology and the new area on the effects of traumatic brain injury on antero-pituitary function. The conclusions are not always obvious, for example, a meta-analysis on placebo-controlled studies that has quality of life as end-points challenges our beliefs.

Especially useful for the clinician is the chapter on clinical monitoring of GH replacement in adults that includes clear paragraphs on baseline monitoring, GH dose titration and on the different hormonal and clinical parameters of efficacy. In addition, the chapter on insulin-like growth factor (IGF)-I covers several points of this complex field going from the problem of IGF-I assay, to epidemiological aspects concerning the association of IGF-I levels with increased mortality for cardiovascular and cancer diseases, to the pitfalls of IGF-I measurement in the diagnosis of AGHD and its utility in monitoring GH treatment. The chapter on the diagnosis of GHD also includes interesting sections devoted to the issues linked to the serum GH measurement and to the meaning of the different GH provocative tests. However, the ‘Cut-off levels’ paragraph could be misleading for the inexperienced reader. In fact, it reports, for all the provocative tests except for ITT, the normal range of GH peaks omitting the GH cut-off clinically used to diagnose severe GHD in adults. Moreover, more emphasis could have been given to the pitfalls of GHD diagnosis in overweight and obese patients and to the need of different cut-off levels in obese patients as well as in subjects reassessed during the transition from paediatric to adult life.

The final chapter is devoted to the side effects and possible risks associated with GH therapy considering the nowadays long experience with this therapy.

All chapters are accurate reviews; they are well referenced and as up-to-date as can be expected in a printed textbook.

In summary Growth Hormone Deficiency in Adults is an excellent book, a scientifically solid and practical text that will be a valuable resource for clinician endocrinologists and graduate students involved in the cure of adult patients with GHD.