Pediatric Neuroendocrinology

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37 figures and 18 tables, 2010
Contents

VII Preface
Loche, S. (Cagliari); Cappa, M. (Rome); Ghizzoni, L. (Turin); Maghnie, M. (Genoa); Savage, M.O. (London)

1 The Transcriptome and the Hypothalamo-Neurohypophyseal System
Hindmarch, C.C.T.; Murphy, D. (Bristol)

11 Role of Sleep and Sleep Loss in Hormonal Release and Metabolism
Leproult, R.; Van Cauter, E. (Chicago, Ill.)

22 Sexual Hormones and the Brain: An Essential Alliance for Sexual Identity and Sexual Orientation
García-Falgueras, A.; Swaab, D.F. (Amsterdam)

36 Corticotropin-Releasing Hormone Receptor Antagonists: An Update
Zoumakis, E.; Chrousos, G.P. (Athens)

44 New Concepts on the Control of the Onset of Puberty
Ojeda, S.R.; Lomniczi, A.; Sandau, U.; Matagne, V. (Beaverton, Oreg.)

52 Roles of Kisspeptins in the Control of Hypothalamic-Gonadotropin Function: Focus on Sexual Differentiation and Puberty Onset
Tena-Sempere, M. (Córdoba)

63 Role of the Growth Hormone/Insulin-Like Growth Factor 1 Axis in Neurogenesis
Åberg, N.D. (Gothenburg)

77 Sex Steroids, Growth Hormone, Leptin and the Pubertal Growth Spurt
Rogol, A.D. (Indianapolis, Ind./Charlottesville, Va.)

86 Endocrine and Metabolic Actions of Ghrelin
Gasco, V.; Beccuti, G.; Marotta, F.; Benso, A.; Granata, R.; Broglio, F.; Ghigo, E. (Turin)

96 Pitfalls in the Diagnosis of Central Adrenal Insufficiency in Children
Kazlauskaitė, R. (Chicago, Ill.); Maghnie, M. (Genova)
108 Central Nervous System-Acting Drugs Influencing Hypothalamic-Pituitary-Adrenal Axis Function
Locatelli, V.; Bresciani, E.; Tamiazzo, L.; Torsello, A. (Monza)

121 Genetic Factors in the Development of Pituitary Adenomas
Vandeva, S.; Tichomirova, M.A.; Zacharieva, S.; Daly, A.F.; Beckers, A. (Liège)

134 Diagnosis and Treatment of Cushing’s Disease in Children
Savage, M.O.; Dias, R.P.; Chan, L.F.; Afshar, F.; Plowman, N.P.; Matson, M.; Grossman, A.B.; Storr, H.L. (London)

146 Prolactinomas in Children and Adolescents
Colao, A. (Naples); Loche, S. (Cagliari)

160 Pituitary Tumors: Advances in Neuroimaging
Morana, G.; Maghnie, M.; Rossi, A. (Genoa)

175 Resistin: Regulation of Food Intake, Glucose Homeostasis and Lipid Metabolism
Nogueiras, R.; Novelle, M.G.; Vazquez, M.J.; Lopez, M.; Dieguez, C. (Santiago de Compostela)

185 Hypothalamic Obesity
Hochberg, I.; Hochberg, Z. (Haifa)

197 Neuroendocrine Consequences of Anorexia Nervosa in Adolescents
Misra, M.; Klibanski, A. (Boston, Mass.)

215 Author Index
216 Subject Index
Preface

Pediatric neuroendocrinology is an important field of clinical and scientific interest, which has rarely been addressed as a single entity. Consequently, this is a particularly welcomed volume. In this issue of *Endocrine Development*, an eclectic group of high-quality clinicians and scientists has been assembled to provide focussed updates of their particular fields of interest. The scope of pediatric neuroendocrinology and its potential disturbances is wide and has direct relevance to both pediatric and adult endocrinology, as major pediatric pathology is likely to have implications in adult life.

The principle hypothalamic-pituitary axes with discussion of the neurobiology and its disturbances in a range of topics including neurogenesis, sleep and its abnormalities, sexual differentiation, onset of puberty, and stress are all covered here. The physiology and pathophysiology of ghrelin, leptin and kisspeptin are described as well as the pharmacological effects of modulating the hypothalamo-pituitary-adrenal axis. Contributions with a more clinical orientation include those on disease entities such as abnormal puberty, central adrenal insufficiency, pituitary tumors and Cushing’s disease. Advances in investigations such as neuroimaging and the molecular characteristics of pituitary adenomas are provided by the leaders of their respective fields. Finally, two chapters on the extremes of disordered energy balance, namely hypothalamic obesity and anorexia nervosa, highlight the endocrine disturbances in and the therapeutic options for these serious conditions.

This volume covers a wide range of topics in pediatric neuroendocrinology and informs the reader of the latest scientific developments as well as the diagnostic and molecular techniques and therapeutic options available today. We believe that the volume will benefit scientists and clinicians involved in the care of children with neuroendocrine disorders.

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