

Special Report: 26th Annual Meeting of the European Society for Pediatric Endocrinology (ESPE)—September 6-8, Toulouse, France

Michael Ranke, M.D.
*Department of Pediatrics
University of Tübingen
Tübingen, West Germany*

The presentations at the annual meeting of the ESPE reflect the broad spectrum of interests of ESPE members, who come from many countries, each with different administrative structures and facilities for clinical and basic research in pediatric endocrinology. The main topics of ESPE meetings are therefore aimed at reviewing current developments for a broader audience and at informing selected audiences about recent advances in endocrine research. This year's plenary lectures were devoted to pediatric aspects of endocrine autoimmunity, regulation of growth hormone (GH) secretion by growth-hormone-releasing hormone (GHRH) and somatotropin-release-inhibition hormone (SRIH), and the cDNA of the human insulin receptor and its potential pathologic expression.

Dr. H. A. Drexhage reviewed the more conventional disorders of endocrine autoimmunity. The primary purpose was to point out the contrasting effects of autoimmune reactions, which may stimulate endocrine tissues but may also lead to their destruction. The basic principles of these reactions and the methodologies used to evaluate them have been derived from investigations of disorders of the thyroid gland. Recently, however, a variety of other disorders that mimic classical endocrine disorders but also have an auto-

immunologic pathogenesis have been discovered. Examples are pigmented adrenocortical micronodular dysplasia (PAMD) and precocious puberty. Dr. Drexhage's reference to the high incidence of transplacental passage of thyroid-growth-blocking antibodies as a cause of thyroid agenesis (or ectopia)—a mechanism suggested many years ago by Dr. R. Blizzard—was also supported by a report of Grüters et al (Berlin, West Germany). These investigators found cytotoxic thyroid autoantibodies in 32% (12 of 37) of newborns with hypothyroidism. Dr. Drexhage left his audience with the impression that more advanced techniques to quantitate autoimmune processes would make this field one of the most important areas to investigate in endocrinology.

Dr. W. Wehrenberg summarized what is currently known about GH regulation by GHRH and SRIH. Numerous clinical and experimental investigations are under way in this area, and new data emerge almost daily. Although SRIH appears to play a dynamic role in controlling GH secretion, the pulsatility of GH secretion does not appear to be determined solely by SRIH. Because a multitude of factors influence GH secretion, the two prominent hypothalamic hormones obviously cannot explain all the phenomena of GH secretion that are observed in various clinical states. There are also indications that GHRH exerts a negative effect on GH secretion by reducing GHRH receptors at the

pituitary level. Dr. Wehrenberg also reported a remarkable finding from his work on prenatal growth control: Administration of GHRH antibody to pregnant rats results in smaller offspring.

Two sessions dealt with Cushing syndrome and neonatal hyperinsulinism. Since both disorders are relatively rare in childhood, clinical experience with children with these disorders is still limited. A multicenter approach to standardize modes of diagnosis and treatment was advocated for neonatal hyperinsulinism, a condition whose prognosis is essentially determined by effective prevention of hypoglycemic states. Dr. A. Aynsley-Green pointed out that glucose, diazoxide therapy, and surgery are still the most important modalities in the management of neonatal hyperinsulinism. Based on his experience in cases of disseminated β -cell hyperplasia, Dr. Aynsley-Green advocated a subtotal pancreatectomy (about 95%) to prevent recurrences, which are observed frequently after less radical surgery.

A major segment of the meeting focused on problems related to the potential of GH to improve growth in growth disorders other than "classical" GH deficiency (GHD). Rather than provide solutions to these problems, investigators presenting papers attempted to put the confusion regarding GH measurement into perspective. Several presentations were devoted to GH testing and measurement of spontaneous GH secretion. With respect to spontaneous

GH measurements, for example, there is a diversity of blood-sampling methods and wide variability in approaches to evaluation of the data obtained by these methods. The critical observer was left with the impression that standardization of GH measurements and other parameters

among investigators is badly needed to ensure consistency in reporting data. Similarly, trials evaluating treatment of different growth disorders with GH and GHRH need to be conducted with great care and more patients to validate results. Similar standardization problems appear to be

prevalent in various studies evaluating the treatment of precocious puberty with luteinizing-hormone-releasing-hormone analogues.

The next ESPE meeting will be held in Copenhagen in June, 1988. It will focus on the testis and endocrine problems associated with malignancies.