MEMOIR

ENRIQUE B. DEL CASTILLO
1897–1969

On the last day of June 1969, Enrique B. del Castillo, recognized by all his colleagues and pupils as the father of clinical endocrinology in Argentina, died in Buenos Aires.

Del Castillo was born in Mendoza, at the foot of the Andes, on 14th December 1897, and although the greater part of his scientific activity took place in Buenos Aires, he had a great love for his homeland all his life. He studied Medicine at the University of Buenos Aires and graduated in 1921.

For some years, he worked as a general practitioner in San Vicente, a small town near Buenos Aires. While practising in San Vicente, he attended Professor Viton's lectures on symptomatology and clinical therapeutics at his alma mater and this self-imposed duty involved an additional 3 hours of daily travel.

In 1928, del Castillo met Professor Bernardo Houssay, who by then was director of the Institute of Physiology at the Medical School. At that time, del Castillo started his experimental endocrinological studies related to the oestrous cycle of the rat, studying the influence of castration, splenectomy and epiphysectomy upon the cycle.

During the 'thirties, he paid special attention to cycle modifications produced through grafts and ovary transplants. In 1933, del Castillo was named 'Jefe de Clinica' of Professor Padilla's department and in 1942, he became Head of the Endocrinological Service of the Hospital Riadavía in Buenos Aires. It was there that he accomplished his most important work and created a proper atmosphere for the scientific education of young endocrinologists.

In the light of his experiments carried out in the laboratories, he interpreted the new findings obtained in his clinical work, and his observations made on patients often initiated further experimental investigations with rodents. Enrique del Castillo's work was founded upon two basic principles: experimental endocrinology and a painstakingly careful observation of the patient. They were the basis of his development as a physiologist during the period of his close contact with Professor Houssay, and the quality of a virtuoso diagnostician which he acquired from A. Viton and T. Padilla.

Although the numerous papers published by del Castillo cover extremely varied aspects of clinical as well as experimental endocrinology, his most original work is in the field of sex endocrinology. Working with G. di Paola, he observed the cyclical vaginal response to the daily administration of oestradiol in castrate rats, showing an intrinsic rhythmic capacity of the vaginal epithelium (*Endocrinology* (1942) **30**, 48). A similar cyclical response was found in the human endometrium of ovariectomized women after continuous administration of oestradiol (*J. clin. Endocr. Metab.* (1942) **2**, 215).

Since the first observation of Ahumada and del Castillo in 1932, when they published the history of a patient presenting galactorrhea and amenorrhea
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(Boln. Soc. Obstet. Ginec. B. Aires (1932) 11, 64), Enrique del Castillo had always been interested in this association. In 1933, del Castillo and A. Lanari reported galactorrhea and amenorrhea in a patient with acromegaly (Semana Méd. (1933) 2, 303). Argonz and del Castillo described a syndrome characterized by oestrogenic insufficiency, galactorrhea and decreased urinary gonadotrophins (J. clin. Endocr. Metab. (1953) 13, 79).

Two syndromes of testicular insufficiency were also described by del Castillo, F. de la Balze, A. Trabucco and A. Onativia. One of them is characterized by the absence of the germinal epithelium without impairment of the Sertoli or Leydig cells (J. clin. Endocr. Metab. (1947) 7, 493), while the other one describes a complete absence of Leydig cells, disturbance of germinal epithelium and decreased urinary gonadotrophins (Acta endocr., Copenh. (1953) 12, 8).

In 1946, del Castillo, Argonz and Galli Mainini described a cytological cycle of the urinary sediment and its parallelism with the vaginal cycle (Semana méd., B. Aires (1946) 46, 867). These findings were later developed by L. J. Lencioni (J. clin. Endocr. Metab. (1953) 13, 263) and cytological analysis of the urinary sediment proved to be a good tool in endocrinology and gynaecology.

Although his main interest concentrated on sexual endocrinology, del Castillo also contributed greatly to the knowledge of the thyroid gland. His interest in goitre had to do with the situation in his native Mendoza, where at that time goitre was endemic.

He published many works studying the physiopathology of hyperthyroidism. In 1954, associated with J. B. Stambury, G. L. Brownell, D. S. Riggs, H. Perinetti and L. Itoiz, del Castillo studied the adaptation of man to iodine deficiency. The results of this work were published in the book The Goitre (Harvard University Press, 1954).

Enrique del Castillo maintained a lively interest in the development of every branch of endocrinology and his papers, which can be counted by the hundreds, betoken the depth with which he dealt with the most varying subjects.

Del Castillo’s life was rich in human experience. A tireless worker, he has created a school of teaching, and without any fear of exaggerating his merits, it can be said that all the clinical endocrinologists in Argentina have been educated in the light of this teaching.

Juan H. Tramezzani

Instituto de Neurobiologia,
Obligado 2490, Buenos Aires, Argentina