The Geoffrey Harris Prize Lecture

GH1

Beyond the Adenoma Valley: from FIPA to gigantism and back

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‘Je résolus de m’informer du pourquoi, et de transformer ma volupté en

connaissance’ Baudelaire.

One of the great blessings in life is to be able to work at something that inspires

and interests you. For me, exploration of the diseases caused by abnormal

neuroendocrine function has been my passion. Its complexity and interlinked

nature can be both startlingly confusing and, when better understood, remarkably

logical. But above all, the clinical impact of disordered neuroendocrine function

on the patient is often dramatic, and demands our attention and care.

Pituitary hormonal secretion grabbed my interest as a young researcher,

particularly the abnormalities associated with pituitary adenomas, like my first

publications on FSH secreting and mammosomatotrope pituitary adenomas about

30 years ago. This interest has led me on a very interesting journey that has been

punctuated by research projects that have hopefully contributed positively to the

neuroendocrinology field. Usually these observations have very ordinary

beginnings, usually in a normal endocrine clinic setting, while talking to my

patients and puzzling over a result that seems not to have an easy explanation.

From patients with unexplained familial occurrence of pituitary adenomas arose

the first studies that eventually gave rise to my description of familial isolated

pituitary adenomas (FIPA). From those FIPA cases, it was a logical step to

explore the role of the AIP gene in various settings, including its contribution to a

younger, more severe phenotype in acromegaly. This, in turn, led our work into

the area of gigantism, one that I have found fascinating since I was a young

researcher. This recently came full circle with the discovery of X-LAG syndrome,

a disorder of extreme pituitary gigantism due to a Xq26.3 microduplication,

which itself can present as FIPA. The act of counting off where my patients lived

on my drive home from work in the so-called Adenoma Valley provided the seed

for studies demonstrating the important prevalence of pituitary adenomas in the

general population.

While the initial observations might come from a mundane setting, the proof of a

clinically important finding is the work of many people. In the setting of rare

neuroendocrine disorder research where genetics plays a central role, the journey

to discovery must pass through many stations and airports. It involves the

collaboration and shared work of colleagues around the world, each contributing

their own vital piece of the jigsaw puzzle.

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