Overview of diagnostics of Cushing’s Syndrome

Stelios Tsagarakis (Greece)

Dr Stylianos Tsagarakis is the Head of the Department of Endocrinology and Diabetes of Evangelismos Hospital, a major national expertise center for rare Endocrine disorders in Athens, Greece. He initially graduated from the Medical School of the University of Athens. He was trained in Internal Medicine at Athens General Hospital and subsequently he was trained in Endocrinology at St Bartholomew’s Hospital in London. In 1990, he obtained a PhD degree from the University of London based on studies exploring the regulation of hypothalamic CRH and GHRH secretion and the interactions between the hypothalamus and the immune system. His main fields of clinical research include Neuroendocrinology and Adrenal disorders. He has a major interest in pituitary tumors of all types, especially Cushing’s disease and acromegaly. His clinical concern and research have expanded to include areas of adrenal disorders especially adrenal incidentalomas and mild autonomous cortisol secretion. He has published more than 150 articles in peer-reviewed journals and book chapters including several reviews, consensus articles and clinical guidelines.
ESE Clinical Update on Cushing’s Syndrome

Pitfalls of IPSS
John Newell-Price (UK)

John is Professor of Endocrinology at the University of Sheffield and Sheffield Teaching Hospitals NHS Foundation Trust, UK, where he is the Lead for Specialised Endocrine Services and for the Sheffield ENETS European Centre of Excellence for Neuroendocrine Tumours. His research interests include glucocorticoids, pituitary and neuroendocrine tumours, and he is widely published in these areas. He was Senior Editor of ‘Clinical Endocrinology’ 2016-2020, and co-author on Clinical Guidelines for Diagnosis of Cushing’s (2008) and Treatment (2015) for the Endocrine Society, and Adrenal Incidentaloma (2016) for the European Society for Endocrinology. He serves on the Endocrine Society’s Board of Directors 2020-2022, and was Chair of the Annual Meeting Steering Committee for Endo 2018, Chicago, USA.
Imaging in Ectopic Cushing’s
Anju Sahdev (UK)

Key Learning Points

1. The main imaging modality in the search for the source of ectopic ACTH production is post contrast enhanced CT.
2. The acquisition parameters should be designed to optimise detection of lesions in the pancreas and small bowel.
3. $^{18}$F-FDG PET CT and $^{68}$Ga PET CT are useful supplementary problem solving modalities in cases where CT does not detect a source.
4. MRI with diffusion weighted imaging is also an adjunct for evaluating suspected abdominal and pelvic lesions.
5. Evaluation of tumour bulk in cases of metastatic disease and for disease response, whole body MRI and PET CT would be the modalities of choice.
Steroid metabolomics
Wiebke Arlt (UK)

Wiebke Arlt is the William Withering Chair of Medicine and Director of the Institute of Metabolism and Systems Research, IMSR, at the University of Birmingham.

She leads a large, multi-disciplinary research group, comprising biologists, biochemists, clinician scientists and computational biologists, investigating the regulation and role of steroid metabolism and action in health and disease. As an Honorary Consultant Endocrinologist, she leads specialist services for patients with adrenal and gonadal disorders at the Queen Elizabeth Hospital Birmingham, as part of the Birmingham Health Partners Centre for Endocrinology, Diabetes and Metabolism (CEDAM).

Wiebke has published over 200 original research articles and is a sought-after lecturer. Her scientific work has attracted several major national and international prizes including awards from the Society for Endocrinology UK (Society for Endocrinology Medal Lecture 2010, Clinical Endocrinology Trust Lecture 2015), the European Society of Endocrinology (EJE Prize 2009, Clinical Endocrinology Trust Medal Lecture 2016), the German Society for Endocrinology (Berthold Medal Lecture 2017) and the Endocrine Society USA (Ernst Oppenheimer Award 2010). She has been elected Fellow of the UK Academy of Medical Sciences in 2010.