The Newsletter of the ESE Young Endocrinologists and Scientists



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This document is available on the ESE website: www.ese-hormones.org and also f fb.com/groups/eyes.endo

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EDITORIAL











We were very happy to receive the positive feedback from you during the European Congress of Endocrinology in Lyon, France. We continue with another print issue to mark the EYES 2019 annual meeting in Athens, Greece.

In this issue we are announcing the new era for EYES with a new name: ESE Young Endocrinologists and Scientists. Read more about it on page 3 in the EYES News section. Ashley Castellanos-Jankiewicz (France) and Maria Stamou (Greece) share their experiences of EYES and ECE 2019. On page 6, the amazing Prof Chrousos shares his life story with us. Find out about the Diabetes, Obesity and Metabolism Focus Area on page 7, and on page 8 we introduce the Young Finnish Endocrinologists and Endocrine Scientists. On page 10, we celebrate the 50 year anniversary of bisphosphonates; and on page 11 we have an exciting Hotspur story. Last but not least, read the latest hot topics in the research selection on page 12.

We hope you enjoy this newsletter! We look forward to meeting you all in Athens!

Ljiljana Marina, EYES co-chair

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EYES news

New era for EYES

Since its inception in ~2012, EYES has been fuelled by the enthusiasm and motivation of early career investigators (ECIs) within endocrinology, striving to give an opportunity for all ECIs within the field. This has been the driving force of bringing together likeminded individuals who are passionate about endocrinology and giving a voice for ECIs within this sphere. We have accomplished so much since the birth of EYES including a stand-alone annual EYES meeting which has evolved into a better and better meeting each year, ECI representation across all the ESE committees, a distinct EYES symposium at the ECE and an EYES newsletter to highlight the accomplishments of ECIs and to engage with the broader EYES community.

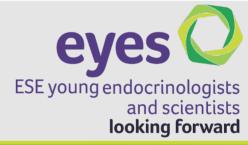
As the years have progressed, the EYES community has grown enormously, now with over 500 ECIs! As such, we are now an established community and will be formally recognised as the ESE Young Endocrinologists & Scientists – the official ECI branch of the ESE. In moving forward and evolving through ESE, EYES aims to provide more opportunities for ECIs including mentoring schemes, Clinical Observership Program (C.O.P) and training opportunities for the European Endocrinology Exam, among many other exciting plans that we have in the pipeline.



This new era of EYES will be structured to deliver even more opportunities for the EYES community and to build on what has been established in years gone by. We are extremely excited and looking forward to the future.

Ayse Zengin and Ljiljana Marina EYES Co-chairs





Announcements

We would like to welcome Antoan Stefan Sojat (Serbia) as the newly elected board member of EYES. Antoan has shown initiative and has been actively involved in a range of EYES initiatives, including the EYES Newsletter and developing the



Clinical Observership Program (C.O.P). We look forward to Antoan officially taking his role on the Board in May 2020.

Stay up to date with the latest EYES News by checking the ESE website: https://www.ese-hormones.org

Register for an early career ESE membership here: https://www.ese-hormones.org/about-us/membership/

Sign up to be a part of the EYES community if you are not already, or please remember to update your details at: https://www.ese-hormones.org/about-us/our-communities/early-career/european-young-endocrine-scientists-eyes/

EYES at ECE 2019

Me and EYES

We asked Ashley Castellanos - Jankiewicz (France), one of the winners of 2019 Young Investigator Award, to share her view of the EYES symposium at ECE 2019.

Participating in a conference of the magnitude of the European Congress of Endocrinology (ECE) can be quite an impressive experience, especially if, like me, this is your first time attending. Although we all arrive with similar objectives in mind (discussing the latest research in your field, for example), one can easily get lost amongst the hundreds (say, thousands!) of clinicians and researchers that rush through one session to the next. But there is no reason to worry: the EYES community have got your back!

The first time I heard about EYES was when I received an invitation to be a speaker in their annual symposium held in Lyon as part of the ECE. So my main goal arriving in Lyon was to succeed in my presentation, and then I would consider the trip a success. I never imagined that there was so much more that this conference could offer.

Personally, I did not know many people when I arrived, but was fortunate enough to have met one of the members of the EYES committee on Day 1 of the conference. In doing so, I was introduced to an enthusiastic group of early career endocrinologists and scientists that are passionate in their work, be it clinical or basic research. Before arriving to the conference, I was quite anxious about my talk, but this changed completely once I realized that I was surrounded by other young researchers I could identify with immediately. So, instead of presenting in a venue with an unknown audience, I had the feeling of sharing my work with a group of colleagues, even friends.

The symposium itself on "organ cross-talk in pathological conditions" was particularly interesting for a diverse audience, since each talk dealt with a completely different field, from bone marrow fat in the context of



caloric restriction, to lipid metabolites as biomarkers for genetic diseases. Furthermore, each speaker had completely different experimental approaches to answer their research questions. This symposium was the ideal platform to discuss my work in such a large conference as the ECE, since I was sure to address motivated young endocrinologists I could discuss with afterwards. Overall, I perceived it as a stage in the ECE where young scientists were given the opportunity to participate as speakers and to chair sessions.

As if this was not enough, all of this was topped off with a social evening that welcomed all early career endocrinologists and scientists, which proved to be the perfect place to 'mix and mingle' with other professionals in the field.

If you are not yet an ESE early career member I highly recommend you join - and at the same time join the EYES community, since it will open the doors to communicate and exchange your work with your peers in a friendly, yet professional, environment.



The Pituitary Masterclass "Expert Insights into the Latest Clinical Data and their Application into Clinical Practice" will take place in Milan on 18th and 19th October 2019.

Places in this educational programme are limited, participants will be selected based on a combination of experience and geography.

You can apply here:

https://masterclass.cor2ed.com/%20pituitary-2019/application/

COR2ED
TRI MANUTO HERIZA GOLGISH
Programme organised by COR2ED

PITUITARY MASTERCLASS

Friday 18th – Saturday 19th October 2019 San Raffaele Congress Centre, Milan, Italy

Expert Insights into the Latest Clinical Data and their Application into Clinical Practice



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EYES at ECE 2019

Me and ECE

For Maria Stamou (Greece/USA) ECE 2019 was her first ECE. We asked her to share her impressions!

What was the highlight of the ECE for you?

This was my first time attending the ECE. I have been following the conferences that the European Society of Endocrinology has been organizing and I have always wanted to attend one. I was thrilled to have my research project accepted for a guided poster presentation at the ECE in Lyon, France.

The whole conference was basically amazing! The plenary presentations, clinical sessions and poster presentations were rich in clinical and research data. I had a great time!

Did you present any work?

I had the opportunity to present the research project I worked on for my PhD thesis. Our team from the University of Patras in Greece (led by Dr. Neoklis Georgopoulos) in collaboration with the Reproductive Endocrine Unit of Massachusetts General Hospital (DCrowley, Dr. Seminara, Dr. Balasubramanian, Dr. Lippincott and Dr. Hayes) in Boston analyzed the largest cohort of patients with isolated GnRH deficiency. We performed detailed phenotyping and genotyping with Sanger and Whole Exome Sequencing.

What did you learn during ECE?

I had the opportunity to attend the session of congenital hypogonadotropic hypogonadism: new insights into GnRH regulation, chaired by Dr. Kaiser and Dr. Pitteloud. Given



that the area of my research interest is reproductive endocrinology, I was thrilled to learn about the role of the transcription factor Gli3 in the neuronal development of the GnRH-1 neurons by Dr. Forni, the role of microRNAs in GnRH development by Dr. Messina and the clinical perspectives of the hypogonadotropic hypogonadism by Dr. Young.

What are your future plans?

I am now completing my residency at Mount Auburn
Hospital of Harvard Medical School and I am about to start
an endocrinology fellowship at Massachusetts General
Hospital, Harvard Medical School in Boston this July. I will
continue my research projects and I will definitely attend
the EYES meeting in Athens this September.

Key Dates

16 - 20 Sep 2019

55th Annual Meeting of the European Association for the Study of Diabetes *Barcelona*, *Spain*

19-21 Sep 2019

58th Annual ESPE Meeting (ESPE 2019) Vienna, Austria

10-13 Oct 2019

25th ESE Postgraduate Training Course on Endocrinology, Diabetes and Metabolism, *Rotterdam, The Netherlands*

16-19 Oct 2019

18-19 Oct 2019

44th Symposium on Hormones and Cell Regulation

Mont Ste Odile, France

Pituitary Masterclass Milan, Italy

24-27 Oct 2019

EndoBridge 2019 Antalya, Turkey

30 Oct - 02 Nov 2019

45th Annual ISPAD Conference Boston, USA

31 Oct 2019

ESE-SEEDER-EU Application Deadline

02 Nov 2019

Masterclass in Thyroidology, Tibilissi, Georgia

07-09 Nov 2019

International Symposium on Graves Orbitopathy Pisa, Italy

14-17 Nov 2019

EuroPit 2019 Annecy, France

Amazing Careers

Prof. George P. Chrousos: The highest cited Endocrinologist in the World

Professor George P. Chrousos is among the most prominent clinical investigators in the world. He has authored more than 1,100 scientific publications, while his work has been cited over 140,000 times. He is the highest cited clinical Pediatrician and Endocrinologist in the world. He is also in the list of 100 most cited scientists in general, with an h factor of 183. He accepted with enthusiasm our invitation to give a lecture on Stress, his main field of scientific interest, during the 7th EYES Meeting in Athens, Greece. On this occasion, we asked him a few more information regarding his fascinating career.

I was accepted with honors at the Medical School of the National and Kapodistrian University of Athens (NKUA), and graduated 6 years later as the valedictorian of my class. I decided to go into paediatrics after a 1-year residency in Internal Medicine. I enjoy interacting with children, and the dynamic developmental dimension of paediatrics appealed to me as a scientist. After completing my paediatric residency at the New York University Medical School and Center, I went to train in Endocrinology, Metabolism, and Diabetes at the National Institutes of Health (NIH), in particular, at the National Institute of Child Health and Human Development (NICHD). I elected to study endocrinology because of its integrative nature and its strong molecular and physiological basis. I was lucky to have had great mentors. Gordon B Cutler, D Lynn Loriaux and Mortimer B Lipsett, all three outstanding endocrinologists and role model physician-scientists, had a powerful effect on me.

I would count among my best honors the opportunity to have worked with unique individuals at the NIH, as well as fantastic collaborators, fellows and friends. I enjoyed caring for complex endocrine patients referred to the NIH by Endocrinologists from around the world. My career at the NIH included establishing an accredited Fellowship Training Program in Paediatric Endocrinology in the 1980s. and a new Endocrine and Reproduction Branch in the 1990s. I am proud that over 60 young endocrine investigators from all over the world spent formative years in my department and now hold international leadership positions in Academia and Industry.

In the early 2000's, after a long career at the NIH, I moved back to my alma mater the NKUA, to become Professor and Chairman of the first Department of Paediatrics, the oldest, largest and most prestigious paediatric department in Greece. My primary role changed, but what I learned in Bethesda came to be of great use in Athens. As head of the Division of Endocrinology, Metabolism and Diabetes, I had the opportunity to supervise several superb young Greek endocrinologists in their formative years. Some of my Greek trainees now hold major positions in Greece and other European countries.

I have been involved with ESE since my return to Europe in the early 2000s. In 2008, I was honored by the prestigious ESE *Geoffrey Harris Prize in Neuroendocrinology*



for my research in the neuroendocrinology of stress and the diseases of the hypothalamic-pituitary-adrenal axis. I have always been impressed by the scope of ESE's work and support, its schools, scholarships, prizes and awards, its contributions to young people, and its commitment to the spread of endocrine knowledge to other continents, where such knowledge is greatly needed and appreciated.

I have been previously asked why at the peak of my career in the USA, I decided to return to Greece. My answer has always been: because Greece at the time needed me more than the USA. This was a decision that I have not regretted. I still love the USA and the NIH and consider them my home. I had a wonderful, productive time that allowed me to learn and grow as a man and as a scientist. For endocrinologists with academic interests I would definitely recommend training in the USA.

George P. Chrousos, MD, MACP, MACE, FRCP Professor of Pediatrics and Endocrinology Emeritus Holder, UNESCO Chair on Adolescent Health Care Director, University Research Institute of Maternal and Child Health and Precision Medicine, National and Kapodistrian University of Athens, Medical School,

Aghia Sophia Children's Hospital, Athens, Greece Distinguished Investigator Emeritus, NICHD, NIH, Bethesda, Maryland, USA

ESE Focus Area

Diabetes, Obesity and Metabolism





The ESE Focus Area Diabetes, Obesity and Metabolism (DOM) covers a broad field of endocrinology. The recently completed ESE survey "Mapping Endocrinology in Europe" with more than 3000 endocrinologists participating across Europe demonstrated that diabetes represents approx. 30% of their time in clinical practice. Despite the fascinating developments in delineating the pathophysiology of these diseases and the considerable expansion of the therapeutic armamentarium, the rising prevalence of diabetes, obesity and other metabolic diseases represents a major challenge for young endocrinologists and a significant socioeconomic burden to our society.

The DOM Focus Area has a Basic Lead represented by Daniela Cota from Bordeaux, France and a Clinical Lead represented by Anton Luger from Vienna, Austria. Expert panel members include: Giles Yeo, Cambridge, UK; Uberto Pagotto, Bologna, Italy; Martin Haluzik, Prague, Czech Republic; Apostolos Tsapas, Thessaloniki, Greece and Ilhan Satman, Istanbul, Turkey.

The aims of the focus areas is to provide support for collaborative activities and to inform about ESE's activities and programmes. We consider it of great importance that diabetes, obesity and metabolism remains a part of the training and practice of endocrinology and oppose all

initiatives to shorten the duration of training and separate diabetes from endocrinology. It is not the intention of the DOM focus area to compete with the European Association for the Study of Diabetes (EASD) and their meetings and activities, but rather provide ESE members and participants of the ECE information on cutting edge basic research and new clinical developments. The programme of the ECE in Lyon in May 2019 reflected this intention quite well and the attendance of the sessions related to DOM themes proved the great interest and acceptance of the 4000 participants for our field.

In a recent meeting of the DOM focus area at the ECE in Lyon, we decided to publish a newsletter twice a year, on new developments in the DOM area, the first one reporting highlights of the meeting of the American Diabetes Association.

Daniela and Anton will be happy to assist you in case you have any questions.

Daniela Cota, France Basic Lead Anton Luger, Austria
Clinical Lead



Young Endocrinologists and Endocrine Scientists in Finland



One of the newest junior societies in endocrinology in Europe, the Young Endocrinologists and Endocrine Scientists in Finland, is an independent committee within the Finnish Endocrine Society, established in 2018. The committee was established with an aim to bring together and improve collaboration and interaction between junior members within the endocrine field in Finland, including both members with a clinical as well as research background comprising of endocrinology residents, recently qualified endocrinologists, PhD students and post-doctoral fellows. There is representation from both adult and pediatric endocrinology, from all six university hospitals in Finland and also from several district general hospitals, ensuring equal representation across the whole country.

The Young Endocrinologists and Endocrine Scientists in Finland is co-chaired by Henna Cederberg-Tamminen, MD PhD (henna.cederberg-tamminen@hus.fi) and Emmi Rotgers, MD PhD (emmi.rotgers@hus.fi), who both are also ambassadors of Finland to the EYES and thus with an active take on international collaboration between junior endocrinologists and endocrine scientists in Europe. Henna and Emmi both carry out active roles both in the clinical field and in endocrine research, representing backgrounds in clinical research and basic science, respectively, thus also



ensuring they cover membership and topics ranging across the entire spectrum of clinical endocrinology, basic, and translational science.

They organize biannual meetings in conjunction with the national Finnish Endocrine Society event, during the annual congress of Finnish Endocrine Society (Endodays) in the autumn, and during the annual spring meeting of the national society. The junior committee meetings have so far, and will in the future cover topics related to early career, career inspirations, information on international matters and planning a post-doc fellowship abroad, and topics both related to early years in clinical endocrinology as well as research themes. They also hope to host an international conference for junior endocrinologists and endocrine researchers in the future.

Communication between the members is multiplatform: there is a junior section on the official website of the national Finnish Endocrine Society, as well as an independent mailing list and social media platform on Facebook. They are delighted to be one of the newest junior societies in endocrinology in Europe and look forward to welcoming many new active members and to an active international collaboration across Europe in the upcoming years!



Suomen Endokrinologiyhdistys r.y. Finlands Endokrinologförening



7th EYES Meeting Athens, Greece

13-15 September 2019 Royal Olympic Hotel

Thank you EYES 2019 LOC!

If you are holding a paper copy of this newsletter it means you are the lucky EYES 2019 participant! We are taking this opportunity to say a big thank you to Lina Paschou and each member of the LOC for the tremendous effort they put to organize this amazing meeting and take such a good care of us! With 200

registered participants, 115 abstracts, 68 oral and 47 poster presentations and 71% of international participants EYES 2019 is already the very best place for a young endocrinologists and scientists to be at, listen to high quality research and meet new friends from all over Europe! Thank you Lina and the LOC!





Alexiadou Kleopatra	Boutzios George	Margaritopoulos Dimitris	Petroliagki Mary
Anagnostis Panagiotis	Bravi Vasiliki	Mavroeidi Ioanna	Prokopiou Maria
Andrikoula Maria	Christou Maria	Mentzelopoulou Paraskevi	Rizoulis Andreas
Antoniou Sofia	Dede Anastasia	Michalakis Kostis	Sapounas Spiros
Antonopoulou Vasiliki	Fountas Athanasios	Mintziori Gefsi	Sfakiotaki Maria
Apostolakis Michael	Kalogeris Nikolaos	Mizamtsidi Maria	Simeakis George
Armeni Eleni	Karaflou Maria	Panagou Maria	Spanoudi Filio
Askitis Dimitrios	Katsiveli Pinelopi	Papadimitriou Kassiani	Tsitlakidis Damianos
Avramidou Despoina	Kogia Christina	Papadopoulou Nektaria	Vasileiou Agathi
Barmpari Maria	Kosteria Ioanna	Paschou Stavroula	Voulgaris Nikos

Celebrating the 50th Anniversary of Bisphosphonates

The first paper on the biological effects of bisphosphonates was published 50 years ago. Since then, a simple PubMed search of "bisphosphonates" returns 29342 publications.

Besides its major role in the treatment of hypercalcemia, osteoporosis and Paget disease, bisphosphonates have found an invaluable place in the treatment of metastatic bone disease. To name a few, their use is associated with a reduced risk of developing breast and colon cancer and reduced risk of contra lateral breast cancer. Among postmenopausal women diagnosed with breast cancer, the use of bisphosphonates after diagnosis was associated with both reduced overall mortality and cancer-specific mortality by 47% to 72%. Also, the recent study by Berutti et al. showed that the administration of bisphosphonates in patients with adrenocortical carcinoma was associated with a lower risk of death, even if not significant, while taking into account that their survival benefit appeared to be limited to patients attaining serum mitotane levels within the therapeutic range.

However, bisphosphonates do not stop to amaze us here, since they have also been shown to have antinociceptive, anti-allodynic and anti-hyperalgesic effects as well. Still, the mechanisms underlying these effects remain largely elusive.

If you go back to basics and think of bisphosphonates in osteoporosis treatment as a clinician, you must have asked yourself at lease once if you should advise osteoporotic patients to take a break from bisphosphonate treatment.



Bente L. Langdahl (Denmark), in her review, published this year in European Journal of Endocrinology, concludes that treatment breaks may be considered if the disease is less severe, the response to treatment has been satisfactory and the risk of future fracture is estimated to be low.

Overall, in these 50 years we have learned a lot, however, it seems we have yet to find out more about this wondrous group of drugs, which have already saved and improved many, many lives.

Sources:

Berruti A. Morbidity and mortality of bone metastases in advanced adrenocortical carcinoma: a multicenter retrospective study. Eur J Endocrinol. 2019 May 1;180(5):311-320. doi: 10.1530/EJE-19-0026.

Langdahl B. MANAGEMENT OF ENDOCRINE DISEASE: Treatment breaks in long-term management of osteoporosis. Eur J Endocrinol. 2019 Jan 1;180(1):R29-R35. doi: 10.1530/EJE-18-0282



Visualising Science: we need your images!



This exciting opportunity is a great way for early career investigators from the EYES community to showcase their creative side. We encourage you to submit your scientific images. For each quarter, the best entry will be featured on the cover of the EYES newsletter. We will be accepting submission throughout the year.

A great image can capture a moment, and communicate a message; it can also help us

A great image can capture a moment, and communicate a message; it can also help us share the various aspects of our scientific work and communicate exciting new discoveries.

Some examples include: microscopic cells, CT, crystal structures, MRI, brain cross-sectional structures, electron microscopy etc.

Submitted images must be high resolution (min 300 dpi), .jpg or .tiff images and cannot exceed 20mb. Each submission should have a title (max 10 words), image caption (max 60 words) and file name (last name_first name).

Please submit images to: youngendocrinescientists@gmail.com.

Hotspur

Loss of examination status

Professor Stephen Shalet is an Honorary Consultant Endocrinologist at the Christie Hospital, Manchester and Emeritus Professor of Endocrinology at the University of Manchester. Professor Shalet has extensive research interests in the late endocrine effects following treatment of cancer, pituitary disorders and in particular abnormalities of growth hormone secretion. He is the author/co-author of over 500 articles and more than 200 of these are related to clinical disorders of the GH-IGF-1 axis and/or therapeutic use of GH therapy in man. 'Hotspur' is the pseudonym professor Shalet used to write anecdotes of clinical and colleague encounters for The Endocrinologist between 2003 and 2012.

Lennie was a teacher. Knowingly or otherwise, he certainly taught me a lot. It was my first medical firm attachment as a clinical student. Lennie wasn't the first patient for whom I was responsible, but he was the most memorable.

He had a multitude of diagnoses, some of which I had barely heard of and others not at all: large multinodular goitre, mixed mitral stenosis and reflux, bronchiectasis, hereditary elliptocytosis, glaucoma and an old facial nerve palsy. He rattled these off as one would a supermarket shopping list. Even if possessed, diagnostic skills were not required for Lennie's pathologies. His pride in the number and variety of the conditions, and the obvious awe on the face of the students that came to his bedside and hung on every word, meant that diagnoses were blurted out instantly rather than revealed painfully slowly by a student historian.

He was in hospital on this occasion for a review of his current medical status. He of course was a regular, as he volunteered his body on every conceivable occasion that student exams were held. By nature, he was a cheerful, optimistic man, who was happiest discussing his medical conditions and how their complexity and interaction had perplexed some god-like consultant or other over many years. After a couple of weeks, it transpired that decisions had been taken for Lennie to undergo mitral valve surgery and a thyroidectomy. He seemed calm about the impending operations, so I was all the more surprised when he returned distraught and tearful to the medical ward several days after the second operation. He denied that he was in any pain or that there was anything wrong with his children or beloved grandchildren. Furthermore his favourite team, West Ham, had won their last couple of



matches. I pushed him a little harder as to the cause of his distress, and he blurted it out in little bursts. 'I'm finished, it's all over.' 'Don't be silly, Lennie, you are fine and will live many years yet.' 'I am not worried about how long I have to live.' 'Then what troubles you?' 'They have stripped me of my physical signs! They will never use me again for student finals - no goitre, no mitral valve murmurs. I'm finished.'

I fought hard and emphasised that he still had the bronchiectasis and the facial nerve palsy up his sleeve (so to speak), but I was in trouble trying to sell the physical signs associated with hereditary elliptocytosis. In truth he was probably right, he never had the same cachet again as the star patient at the student exams.

It was then I realised that operative morbidity could have a wider meaning and that some patients invest a greater commitment to a hospital than many doctors. As for Lennie, he died nine months later, cause of death unknown - but I knew.

Sources:

'Hotspur' 2003-2012 The Endocrinologist 67-103. http://bit.ly/1F1o0Ki.



Accepting applications to host the Annual EYES Meeting

We invite you and your local society to submit an expression of interest to host the future annual EYES meeting (2021, 2022 and 2023).

The EYES congress combines the latest cutting-edge basic, clinical, translational and preclinical research, encouraging scientific networking and opportunities for collaboration in a unique and friendly environment.



It is a Congress for early career investigators (ECI) who are <10 years post-PhD, Masters/PhD student or a clinician in-training. Further details on the congress requirements, including management structure and venue can be found here: https://membermojo.co.uk/eyes. All expressions of interest should be submitted to the EYES Secretary at: young.endocrine.scientists@gmail.com

Latest research

The Diurnal Variation of Bone Formation is Attenuated in Adult Patients with Type 2 Diabetes

An interesting study by Hygum et al. to compare diurnal variation in bone turnover in patients with diabetes and controls. The bone formation marker procollagen type 1 N-terminal propeptide (P1NP) showed a significant interaction between time and group and the mean standard deviation was lower in patients with type 2 diabetes compared with controls and patients with type 1 diabetes. Other markers of bone formation and resorption showed significant effect of time but levels of sclerostin tended to being highest in type 2 diabetes and lowest in controls. This shows that the diurnal variation in bone formation is attenuated in patients with type 2 diabetes and this can possibly be mediated by sclerostin.

Adrenal Venous Sampling: Cosyntropin Stimulation or Not?

It is time for a debate. Cosyntropin (synthetic ACTH) is administered during adrenal vein sampling (AVS) in the attempt to maximize adrenal cortisol secretion and avoid pulsatile adrenocortical hormone secretion in about 40% of the referral centres around the world. However, the Endocrine Society guidelines do not advise on the use or disuse of cosyntropin as stimulus during AVS, as there are arguments both in favour and against its use. These arguments are presented in this debate article by Deinum et al. reflecting the views of groups that currently use and do not use cosyntropin.

Why Do Normal Children Have Acromegalic Levels of IGF-I During Puberty?

Jull et al. hypothesized that the biological significance of the high acromegalic levels of GH and IGF-I, which are behind the pubertal growth spurt, might primarily occur to stimulate the reproductive organs and suggested that the serum levels of IGF-I should be monitored in children with poor development of sexual organs. It remains to be investigated whether GH should be added to sex steroids in the management of hypogonadism for some pubertal children.

Determining the Relationship Between Hot Flushes and LH Pulses in Menopausal Women Using Mathematical Modeling

Hypothalamic kisspeptin/neurokinin B/dynorphin (KNDy) neurones regulate LH pulsatility.

Using a modern immunoassay and mathematical modeling, Prague et al. investigated if the hot flushes and LH pulse were consistently synchronized in menopausal women. Using both models, the probability that the two event intervals matched was low in the majority of participants and this challenges the widely accepted dogma that HFs consistently synchronize with an LH pulse and therefore have clinically important therapeutic and mechanistic implications.

Novel Genetic Locus of Visceral Fat and Systemic Inflammation

The mechanisms of preferentially visceral accumulation of body fat are largely unknown. That is why, Shin et al. conducted a genome-wide association study (GWAS) to identify genetic loci and mechanistic pathways of preferential accumulation of VF and associated low-grade systemic inflammation. A genetic locus near ATG5 was found to regulate preferential accumulation of VF (vs SF) in youth and adulthood and contribute to the development of systemic inflammation in adulthood.

Antoan Stefan Sojat, Serbia



European Society of Endocrinology (ESE) continuously supports EYES by providing resources and opportunities for early-career endocrine scientists. Visit the ESE website and find out how to join the Society from as little as 10€:

www.ese-hormones.org



