THE LETTER FROM THE SOCIETY FOR ENDOCRINOLOGY TO CHRISTINE AGREEING THAT A NORMAL SYNACTHEN TEST DOES NOT EXCLUDE HYPOPITUITARISM

Society for Endocrinology

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25 January 2011

Dear Ms Wrightson

Thank you very much for your enquiry dated 7 January 2011 concerning the diagnosis of hypopituitarism. We are very sorry to hear about the difficulties you faced in receiving a correct diagnosis for your condition. I'm glad to hear that you are now receiving the correct treatment and hope that your health continues to improve.

Thank you for raising the important issue of diagnosis of hypopituitarism to us. I forwarded your enquiry to our Clinical Committee and they agree with your analysis of the situation that if a patient receives the short synacthen test and the results come back as in the normal range, but the patient still exhibits clinical symptoms characteristic of adrenal insufficiency, then further testing to rule out hypopituitarism should be arranged for that patient.

The Society for Endocrinology is committed to promoting patient care. Our role is to represent clinicians, scientists and nurses who work on hormones. As such, we aim to support these professionals in carrying out their jobs by providing a number of services. These include publishing journals on hormone research, organising meetings and training events, providing a voice for endocrinologists and providing information to the public on all aspects of endocrinology.

We are aware of the issues that surround the diagnosis of hypopituitarism and the current lag time to diagnosis experienced by many patients. We are currently carrying out a number of initiatives to try to improve this situation and provide more information to both our members and the wider public about this.

1. We run an annual training course called Clinical Update for trainee doctors and new consultants in endocrinology. This course provides them with training on the national curriculum in endocrinology and prepares the doctors to sit their exams in this speciality. One of the key areas covered by this training course is the diagnosis and treatment of pituitary disorders, including hypopituitarism.

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2. We provide information to our members on the latest research on hypopituitarism. This can be through new research published in our journals. In addition, we organise a number of meetings each year to keep our membership up to date with the latest research on hormones. For all of our events, we encourage attendees to submit reports on their research/case studies etc. for presentation. We are always very keen to hear from any researchers who are working on hypopitutarism. You can find a summary of all research presented at our annual SfE BES conference at the following website: http://www.endocrine-abstracts.org/

3. Our Clinical Committee works to promote best practice in all areas of endocrinology (for example by publishing clinical practice guidelines) and this often involves working with patient support organisations such as the Pituitary Foundation.

4. We are currently in the process of developing a website aimed at the public to cover the breadth of endocrinology. The aim of this website will be to provide the public with accurate, up-to-date and easy to understand information on a whole range of endocrine disorders. One of the areas that we will be covering on this website is hypopitutarism. Our current aim is for the website to go live later this year. **Although I realise this is only a first step, I think that providing a written resource on this topic, by the leading doctors in the field, will give members of the public a reference point and provide them with accurate, up-to-date information on this area.**

I have forwarded your correspondence to our Clinical Committee in order to inform their debate on this topic. You can be assured that the Society will continue to monitor all new research published in this area and will make appropriate use of this if warranted.

I hope this information is helpful.

With best wishes
Yours sincerely

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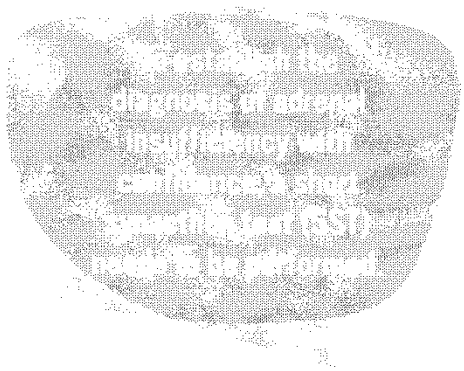
THE PAGE FROM THE SOCIETY FOR ENDOCRINOLOGY'S ADRENAL INSUFFICIENCY LEAFLET ENDORSING THE SHORT SYNACTHEN TEST GIVING NO CLUE TO ITS INADEQUACY FOR DIAGNOSING SECONDARY HYPOADRENALISM

How is adrenal insufficiency diagnosed?

Signs and symptoms associated with adrenal insufficiency, such as exhaustion, fatigue, muscle weakness and weight loss, are often unspecific. Adrenal insufficiency may cause changes in the blood salt levels, eg low serum sodium and high serum potassium. Often there is borderline low red blood cell counts ("anaemia") as well. However, these findings are relatively unspecific and can be found in the context of several conditions other than adrenal insufficiency.

To establish the diagnosis of adrenal insufficiency with confidence, a short synacthen test (SST) needs to be performed. This test is also known as an ACTH stimulation test or a cosyntropin test. The short synacthen test measures the ability of the adrenal glands to produce cortisol in response to ACTH, the pituitary hormone that regulates adrenal cortisol production. When carrying out this test a baseline blood sample is drawn before injecting a dose of ACTH, followed by drawing of a second blood sample 30-60 min after the ACTH injection. If the adrenal glands are healthy, cortisol production in the second sample will exceed a certain level, commonly 500-550 nmol/L. By contrast, failing adrenal glands will not be able to produce this amount of cortisol. It is important that this test is carried out under the supervision of an endocrinologist, a doctor specialising in hormone-related diseases.

Drawing only baseline blood samples for cortisol, without injecting ACTH to stimulate cortisol production, is only of very limited value in the diagnosis of adrenal insufficiency as this does not reflect the ability of the adrenals to respond to stress with increased production of cortisol. Stress such as surgery or trauma modifies cortisol production. Thus a certain cortisol concentration may be appropriate in a relaxed patient but much too low for a severely distressed patient. Only a dynamic function test, commonly the short synacthen test described above, can give a conclusive answer, supported by the clinical judgement of an experienced endocrinologist.