The Association for Clinical Biochemistry & Laboratory Medicine

Better Science, Better Testing, Better Care

Summary of NICE Guidelines

Title	Human growth hormone (somatropin) in adults with growth hormone deficiency
NICE Reference	TA64
Date of Review:	October 2017
Date of Publication	August 2003 (reviewed November 2014)
Summary of Guidance (Max 250 words)	NICE has recommended that somatropin (recombinant human growth hormone) should only be given to adults who have: ▪ a peak growth hormone response of less than 9 mU/litre in the insulin tolerance test for growth hormone deficiency or a similar low result in another reliable test AND ▪ an impaired quality of life because of their growth hormone deficiency (judged using the 'Quality of Life Assessment of Growth Hormone Deficiency in Adults' questionnaire; a person should score at least 11 in this questionnaire) AND ▪ are receiving replacement hormone treatment for any other deficiencies of pituitary hormones if required. NICE has also said that people who are prescribed somatropin should have their quality of life checked again nine months after starting the treatment. For the treatment of people who develop growth hormone deficiency in early adulthood, NICE has recommended that if the peak growth hormone response is less than 9 mU/litre when assessed, then growth hormone treatment should be given until adult peak bone mass is achieved. Thereafter, the patient should be reassessed for the appropriateness of continued treatment with somatropin, in line with the three measures described above. Those receiving NHS treatment with somatropin before the NICE guidance was issued should have the option of continuing treatment if appropriate. Finally, NICE has recommended that the first stages of treatment should be carried out by a specialist consultant endocrinologist. Thereafter, if somatropin is to be prescribed by the person's GP, then the GP and consultant should share the person's care.
Impact on Lab (See below)	☐ None

Lab professionals to be made aware	☒ Chemical Pathologist ☒ Clinical Scientist
Please detail the impact of this guideline (Max 150 words)	With regards to the NHS, it is estimated that fewer people than the number of patients currently receiving treatment will qualify for somatropin treatment. Therefore, implementing this guidance will not incur any additional costs to the NHS, and has the potential to positively impact financial savings. In addition, this guidance could help to standardise the clinical management of GH deficiency in adults, which is centred on replacement therapy with somatropin. Chemical pathologists and clinical scientists will need to consider this guidance in daily practice. They should be aware of this guidance as it provides clinical context for the requesting of insulin tolerance tests or other reliable tests for the determination of peak growth hormone response by service users. It will also provide them with a good understanding of best practice with regards to the treatment of adults with growth hormone deficiency using somatropin, which will enable better dialogue with clinicians.

Impact on Lab

- **None**: This NICE guideline has no impact on the provision of laboratory services
- **Moderate**: This NICE guideline has information that is of relevance to our pathology service and may require review of our current service provision.
- **Important:** This NICE guideline is of direct relevance to our pathology service and will have a direct impact on one or more of the services that we currently offer.

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