Lanreotide Autogel® in the Management of Acromegaly

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Patients with acromegaly have an approximately 2-fold increased mortality. [1] Epidemiological studies have shown that this risk is associated with elevated levels of growth hormone (GH) and insulin-like growth factor-I; therapies successful in bringing GH values to <2.5 $\mu g/L$ result in normalization of this increased mortality. [1] Transphenoidal surgery is generally preferred initially, but it is successful in reducing hormone levels to acceptable levels in only about 80% of those with microadenomas (40% of patients) and less than 50% of those with macroadenomas (60% of patients). Thus, adjunctive therapy is needed in nearly 50% of patients.

Cabergoline, a dopamine agonist, is only successful in normalizing hormone in less than 20% of patients but, because of relatively low cost and ease of use, is often tried initially.

Somatostatin analogues remain the mainstay of medical therapy, resulting in acceptable hormone levels and tumour size control in 50–60% of patients. The two currently available agents, lanreotide Autogel® ¹ (ATG) and octreotide long-acting repeating (octreotide LAR), have similar degrees of efficacy in these two aspects of treatment and in their adverse effect profiles. The major difference between them in clinical use is the substantial difference in ease of administration. Octreotide LAR is first reconstituted into a thick viscous material and must be injected intramuscularly, very carefully, by an experienced nurse; otherwise, clogging may occur. This limits these injections to offices of practi-

tioners who do this routinely and patients cannot just go to their local physicians or clinics to have this done. Lanreotide ATG is a water-soluble gel that comes pre-packaged in a syringe and may be selfadministered or given by a partner with minimal teaching. Thus, it may be given in the home or by a local nurse, if preferred. From a practical point of view, this has substantial benefits.

When a patient's hormonal levels are not controlled with somatostatin analogue treatment, the addition of cabergoline at that point may be beneficial. Some patients may require switching to, or the addition of, pegvisomant, a GH-receptor antagonist. Stereotactic radiotherapy is often also used as adjunctive therapy with or without concomitant medical therapy.

These multiple modes of therapy can thus achieve hormonal and tumour control in well over 90% of patients, with an overall reduction of expected mortality to normal. Reductions in the various morbidities of acromegaly occur in parallel.

Reference

 Dekkers OM, Biermasz NR, Pereira AM, et al. Mortality in acromegaly: a meta-analysis. J Clin Endocrinol Metab 2008; 93: 61-7

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