PHARMACOTHERAPY

Pegvisomant as add-on to somatostatin analogue therapy

Addition of around 60 mg pegvisomant weekly to somatostatin analogue (SSA) therapy has an equal efficacy as pegvisomant monotherapy, enabling a dose reduction in weekly pegvisomant of more than 50%, according to a new study in the *European Journal of Endocrinology*.

“Combining somatostatin analogues and pegvisomant decreases endogenous growth hormone (GH) levels,” explains lead investigator A. J. Van der Lely (Erasmus MC, Rotterdam). “Also, the liver becomes selectively GH-resistant via several mechanisms. Therefore, the competitive GH receptor antagonist pegvisomant meets less GH to compete with and needs to block less GH receptors in the liver in order to decrease insulin-like growth factor 1 (IGF-1) levels.”

Van der Lely and co-workers enrolled 92 patients, who were biochemically uncontrolled on SSAs or on pegvisomant monotherapy. All study participants entered a 4-month run-in period, in which

they received a monthly 120 mg dose of the SSA lanreotide. Patients biochemically uncontrolled after this period ($n=57$) entered a 28-week coadministration period, receiving 120 mg lanreotide per month plus pegvisomant (60 mg once weekly, adapted every 8 weeks based on IGF-1 levels to 40–80 mg once weekly or 40 mg or 60 mg twice weekly). This regimen enabled assessment of the dose at the final visit, as well as the percentage of patients who exhibited normalization of IGF-1 levels at least once during the study period.

Around 80% of patients had normalized IGF-1 levels on at least one occasion. Although no head-to-head comparison was performed, the researchers confirmed that a dose reduction of more than 50% in weekly pegvisomant can be expected after a switch from monotherapy to combination therapy.

“As SSAs are more effective in controlling tumor size, the combination might be more attractive for patients with large tumors,”

adds Van der Lely. “Also, for patients who need high-dose pegvisomant monotherapy, a dose reduction of say 50%, for example, from 200 mg to 100 mg per week, would save €40,000 per year.” As the mean market price of high-dose SSA monotherapy is around €20,000 per year in the EU, this reduction would notably reduce costs.

Linda Koch

Original article Van der Lely, A. J. *et al.* Coadministration of lanreotide Autogel® and pegvisomant normalizes IGF1 levels and is well tolerated in patients with acromegaly partially controlled by somatostatin analogs alone. *Eur. J. Endocrinol.* doi:10.1530/EJE-10-0867