CASE

- A 63-years-old acromegalic woman admitted to our hospital for lassitude and dizziness.
- She has been diagnosed acromegaly ten years ago and had two transsphenoidal operations.
- Since remission has not achieved she started to use Lanreotide (somatostatin analogue) and for seven years she has been treated with it.
- Laboratory examination revealed that, basal plasma growth hormone (GH) level 1.21 ng/mL (normal range: 0-5); nadir GH level after glucose tolerance test 1.2 ng/mL (normal range: less than 1); Insulin-like growth factor-1 (IGF-1), 129.1 ng/mL (normal range: for age: 75-212); thyroid stimulating hormone (TSH), 0.824 uIU/mL (normal range: 0.27-4.2); free thyroxine (T4), 1.26 ng/dL (normal range: 0.9-1.7); and prolactin, 6.66 ng/mL (normal range in women: 0-20).
- Magnetic resonance imaging (MRI) of pituitary gland with gadolinium contrast revealed a pituitary microadenoma.
- Since routine resting electrocardiograms of patient showed bradycardia (46 bpm) and supraventricular extrasystoles, lanreotide treatment stopped. After then patient's symptoms relieved and heart rate increased (64 bpm).

CONCLUSION

- Somatostatin is a peptide hormone with a short half-life (2-3 min), which is synthesized in multiple tissues, including the hypothalamus, to inhibit GH secretion.
- Somatostatin analogues (Octreotide and Lanreotide) are indicated principally for the treatment of acromegaly that remains active after transsphenoidal surgery, whether or not the patient has also undergone radiotherapy.
- Octreotide-induced bradycardia has previously been reported as an unusual finding in different clinical situations (nonacromegalic patients) and a male patient with acromegaly. A rat study shows bilateral microinjection into the rostral ventrolateral medulla of either somatostatin or the receptor-selective agonist lanreotide evoked dramatic, dose-dependent sympathoinhibition, hypotension, and bradycardia.
- Our case is the first reported patient with acromegaly who had bradycardia and supraventricular extrasystoles associated with use of Lanreotide.