Acromegaly Management Update

Pituitary Society update on presentation/monitoring, medical therapy advances, and oral octreotide capsules.

2021 Pituitary Society
Update to Acromegaly Management Guidelines
Fleseriu et al. · Pituitary 2021;24:1–13

GRADE SR · Strong Rec. DR · Discretionary Rec.

1 Presentation, Monitoring & Outcomes

SR **Biochemical control** remains the strongest predictor of outcomes (glucose metabolism, OSA, cardiovascular disease, vertebral fractures) — but structural heart/joint changes are unlikely to resolve even with control.

SR **IGF-I at 6 weeks postop** assesses remission in most patients; mildly elevated IGF-I may still normalize by 3–6 months.

DR **Women** (especially postmenopausal) may have lower surgical remission rates from TSS due to larger, more invasive tumors; patient **age itself** does not predict surgical outcome.

SR ~50% of patients treated with **SRS/FRT** achieve and maintain long-term biochemical control; up to **one-third** with normal pituitary function develop hypopituitarism — warrants ongoing monitoring.

2 Medical Therapy Advances

SR **Predictors of favorable lanreotide response:** older age, female sex, lower baseline IGF-I, and T2 MRI hypointensity. **Pasireotide LAR** is effective in patients uncontrolled on octreotide/lanreotide, but carries high rates of treatment-induced hyperglycemia/DM requiring monitoring.

SR **Pegvisomant** (10-yr ACROSTUDY): 73% biochemical control, low transaminase elevation, 6.8% MRI tumor growth. Improves glucose metabolism in patients with DM independent of IGF-I control; higher BMI/DM patients need higher doses and faster up-titration.

SR **Combination SRL + weekly pegvisomant** (low-dose) is cost-effective and efficacious. **Pasireotide + pegvisomant** achieves >70% control even at low pegvisomant doses, but doesn't reduce pasireotide-induced hyperglycemia — select patients carefully.

3 Oral Octreotide Capsules (OOC)

SR **Candidates:** complete/partial biochemical response on injectable octreotide or lanreotide. **Not currently recommended** if tumor has resistance-predictive features (T2 MRI hyperintensity, sparsely granulated).

SR **Initiate at 40 mg/day** (20 mg twice daily, 1h before or 2h after meals) — some data support a 60 mg/d start. Begin at the time of the **next scheduled SRL injection**.

DR **Up-titrate by 20 mg every 2–4 weeks** based on IGF-I and symptoms — notably faster than typical injectable SRL titration (~every 3 months).

Remember — Evidence grading here differs from the 2014 Endocrine Society acromegaly guideline: SR/DR reflect the Pituitary Society's evidence-quality framework, not GRADE 1/2.

Fleseriu M, Biller BMK, Freda PU, et al. A Pituitary Society Update to Acromegaly Management Guidelines. *Pituitary.* 2021;24(1):1–13.