NHS
Pan Mersey
Area Prescribing Committee

LANREOTIDE solution for injection (Somatuline Autogel®) for the treatment of angioectasia

The Pan Mersey Area Prescribing Committee recommends the prescribing of LANREOTIDE solution for injection (Somatuline Autogel®) by specialists only, for the treatment of angioectasia.

RED

Lanreotide has been shown to reduce transfusion requirements, reduce anaemia and reduce health resource consumption in patients with recurrent angiodysplastic bleeding or obscure overt bleeding from the gastrointestinal (GI) tract.[1,2,3] The use of lanreotide for the treatment of angioectasia is off-label.

Long term treatment with lanreotide for GI bleeding has been associated with 18.5% of patients having a complete response, and a further 60% of patients having a 50% reduction in health resource consumption.[1]

Lanreotide is recommended in international clinical guidelines where bleeding persists, recurs or if a lesion cannot be localised (strong recommendation, moderate level evidence).[4]

Lanreotide for the treatment of angioectasia should only be initiated when all other treatment options have been exhausted. It should only be initiated by a gastroenterologist experienced in the management of patients with angioectasia and after appropriate investigations have been undertaken. Prescribing and monitoring should be retained by the specialist.

Lanreotide at a dose of 120mg given by subcutaneous injection every 4 weeks is associated with a cost of £11,244 per patient, per annum. Treatment is expected to generate cost-efficiencies through reduced requirements for healthcare contact, specialist review and intervention.

Note: Patients who are not eligible for treatment under this statement may be considered on an individual basis where their GP or consultant believes exceptional circumstances exist that warrant deviation from the rule of this policy. In this situation, follow locally defined processes.

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LANREOTIDE solution for injection (Somatuline Autogel®) for the treatment of angioectasia

Effectiveness

Pharmacology

Lanreotide is an octapeptide analogue of natural somatostatin, with a mechanism of action which includes reduction of splanchnic blood flow and down-regulation of VEGF. It may also increase platelet aggregation. Lanreotide is an inhibitor of various endocrine, neuroendocrine, exocrine and paracrine functions and exhibits a general exocrine anti-secretory action. It inhibits the basal secretion of motilin, gastric inhibitory peptide and pancreatic polypeptide, but has no significant effect on fasting secretin or gastrin secretion. It inhibits meal-induced increases in superior mesenteric artery blood flow and portal venous blood flow.[5]

Angioectasia

In a retrospective study 27 adult patients (mean age 76.8 years) with GIAD bleeding or OGIB, 63% of whom were taking anticoagulants/antiplatelets, were managed with lanreotide for at least 6 consecutive months (median 27.1 months). During follow-up of up to 3 years (mean 32.5 months), 18.5% of patients achieved complete response and 60% a 50% reduction of health resource consumption (number of blood transfusions, endoscopic procedures, hospital admission days and intravenous iron infusion). Haemoglobin (Hb) values also improved (p=0.007).[1]

In a study of 49 patients with refractory iron deficiency anaemia secondary to small bowel angioectasia all with significant comorbidities and a mean duration of anaemia of 114.3, (SD 307.0 months) were divided into two groups. Group 1 [37 patients (75.5%)] were managed with double balloon enteroscopy (DBE) and argon plasma coagulation (APC) alone and Group 2 [12 patients (24.5%)] received lanreotide in addition to DBE and APC. Significant improvements in Hb (11g/L vs. 3.2g/L p=0.043), transfusion requirements per month (0.8 vs. 4.7 p=0.052) and mean bleeding episodes (1.08 vs. 2.6 p=0.032) were demonstrated in group 2 when compared to group 1.[2]

In 12 patients (mean age 74 SD ± 15.5 years, all with co-morbidities) with small bowel angioectasias on capsule endoscopy (CE), Lanreotide at a dosage of 60 mg (42%), 90 mg (33%) or 120 mg (25%), given at a four-week intervals in 75% of patients and at a six-week interval in 17% of patients, for a mean duration of 19 months (SD ± 14.5) was associated with a significant improvement in mean Hb: 86.8 versus 98.0 (131–166 g/L, p=0.012). The mean number of bleeding episodes (4.18 versus 1.09, p=0.010) and packed red cells (323 versus 152, p=0.006) received improved. Patients required less DBEs ± APCs after starting lanreotide (19 versus 11 p=0.048).[3]

Somatostatin analogues are recommended by the American College of Gastroenterology if bleeding persists or recurs, or a lesion cannot be localised (strong recommendation, moderate level evidence).[4]

Safety[5]

Lanreotide's safety for its licensed indications is widely established. It is contraindicated if the patient has hypersensitivity to somatostatin or related peptides or to any of the excipients. Cholelithiasis, diarrhoea and abdominal pain are reported as a very common adverse effects. Patients treated with lanreotide may experience hypoglycaemia or hyperglycaemia. Blood glucose levels should be monitored when lanreotide is initiated, or when the dose is altered and any anti-diabetic treatment should be adjusted accordingly. In patients suffering from cardiac disorders prior to lanreotide treatment, sinus bradycardia may occur. Care should be taken when initiating treatment with lanreotide in patients with bradycardia. Refer to SPC for full safety information.

Lanreotide may result in the reduction of the intestinal absorption of ciclosporin leading to reduced bioavailability. This may necessitate the adjustment of ciclosporin dose to maintain therapeutic levels.

Concomitant administration of bradycardia inducing drugs (e.g. beta blockers) may have an additive effect on the slight reduction of heart rate associated with lanreotide. Dose adjustments of such concomitant medicines may be necessary.

Limited published data available indicate that somatostatin analogues may decrease the metabolic clearance of compounds known to be metabolised by cytochrome P450 enzymes. Drugs mainly metabolised by CYP3A4 and which have a low therapeutic index (e.g. quinidine, terfenadine) should be used with caution.

Refer to SPC for full details of interactions.[5]

Cost

Lanreotide at a dose of 120mg given by subcutaneous injection every 4 weeks is associated with a cost of £11,244 per patient, per annum.[6] Estimated less than 10 patients per year across the Pan Mersey health economy.

Patient factors[5]
Cautions regarding use of lanreotide in patients with diabetes and cardiac disease are included in the SPC. See Safety section above. No dosage adjustment required in elderly patients or those with renal or hepatic impairment.

Prescribing Information

Dose

- The recommended dosage is 120mg every 4 weeks with a review of response to treatment at 12 weeks.
- Doses for angioectasia in the literature vary from 60-120mg, administered subcutaneously, every 4-6 weeks.

Administration

- Lanreotide (Somatuline Autogel) is administered by deep subcutaneous injection in the superior external quadrant of the buttock or in the upper outer thigh.
- For patients who receive a stable dose of lanreotide (Somatuline Autogel), and after appropriate training, the product may be administered either by the patient or by a trained person. In case of self-injection the injection should be given in the upper outer thigh. The decision regarding administration by the patient or a trained person should be taken by a healthcare professional.
- Regardless of the injection site, the skin should not be folded and the needle should be inserted rapidly and to its full length, perpendicularly to the skin.
- The injection site should alternate between the right and left side and patients who are self-administering lanreotide (Somatuline Autogel) should be advised of this.

Communication

- As per the Pan Mersey Good Practice for Prescribing Unlicensed and "Off-Label" Medicines, including "Specials", prescribers should follow good practice recommendations for communicating about off-label use with the patient.

Monitoring

- Ultrasound examination of the gallbladder is recommended before treatment is initiated, and at 6 to 12 monthly intervals during treatment.
- Full blood count (FBC) should be checked at baseline and every 2 weeks for the first 3 months of treatment (or more frequently if transfusion-requirements indicate that is required). FBC should then be checked monthly thereafter.
- Patients should be monitored for signs of hypothyroidism when clinically indicated.[5]

Stopping treatment

If the patient is no longer blood transfusion-dependent at 12 months then consideration should be given to stopping treatment, with a plan to restart if bleeding recurs.

Implementation notes

- Lanreotide for the treatment of angioectasia should only be initiated when all other treatment options have been exhausted.
- It should only be initiated by a gastroenterologist experienced in the management of patients with angioectasia and after appropriate investigations have been undertaken.
- Prescribing and monitoring should be retained by the specialist.

References

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