Octreotide

Endocrinology Shared Care Guideline

Using a printed guideline? Always check you are using the most up to date version.

Specialist Details

Name: _____

Location: _____

Tel: _____

Patient Identifier

Date: _____

Introduction

Octreotide is an analogue of natural hypothalamic release-inhibiting hormone, somatostatin. It exerts inhibitory effects on the secretion of growth hormone and on various peptides of the gastroenteropancreatic endocrine system.

Licensed indications:

- **Treatment of patients with acromegaly**: in whom surgery, radiotherapy or dopamine agonist treatment is inappropriate or ineffective, or in the interim period until radiotherapy becomes fully effective.
- **Gastroenteropancreatic neuroendocrine tumours** (GEP-NET tumours): relief of associated symptoms.

Adult dosage and administration:

Acromegaly:

Octreotide LAR: the usual initial dose is 20mg by deep IM injection into the gluteal muscle every 4 weeks. The dose may be increased to a licensed maximum of 30mg every 4 weeks. In some cases doses up to 40mg are used.

Dose adjustment is based on subsequent measurements of circulating growth hormone (GH) and/or Insulin like Growth Factor-1 (IGF-1), symptoms and adverse effects.

GEP-NET tumours:

Treatment is usually initiated using the 50 micrograms/ml subcutaneous injection until adequate control is achieved before changing to the depot preparation.

Initially: 50 micrograms once or twice daily by subcutaneous injection, increasing to 200micrograms three times daily. For patients who are poorly controlled the effective subcutaneous dose may be continued for two weeks after the first depot injection.

Octreotide LAR: initially 20mg by deep IM injection into the gluteal muscle every 4 weeks for 3 months. The dose may be increased to 30mg every 4 weeks.

Available as:

Octreotide injection: 1ml solution for injection:50micrograms/ml,100micrograms/ml, 500 micrograms/ml, 5ml solution for injection: 200micrograms/ml

Hospital Specialist Responsibilities

- Assess if patient is suitable for treatment.
- Provide the patient with relevant information on use, side-effects and need for monitoring of medication.

Baseline tests:

- Hormone levels: IGF-1, GH, Thyroid function.
- Baseline ultrasonic examination of the gallbladder is recommended.

Hospital Specialist Responsibilities (continued)	• Arrange shared care with the patient's GP, sending a copy of this shared care guideline. • Monitor response to treatment using hormone levels at each review appointment. • Review results of safety monitoring and request additional tests as required. • Monitor disease response to treatment and need to continue therapy. • Continue to review the patient at specified intervals, sending a written summary to the GP whenever the patient is reviewed. • Provide any other advice or information on therapy or associated therapy to the GP if requested.
GP Responsibilities	• Prescribe octreotide: continued prescribing is appropriate for patients attending regular review. • Arrange practice/district nurse to administer where appropriate. • Adjust the dose as advised by the specialist. • Report adverse drug reactions to initiating specialist and usual bodies (e.g. CHM). • Ensure no drug interactions with other medicines.
Adverse Effects, Precautions and Contraindications	**GI side effects** (anorexia, nausea, vomiting, cramping abdominal pain, abdominal bloating, flatulence, loose stools, diarrhoea and steatorrhoea) are common. **Pruritus, rash, alopecia** are common. Growth hormone secreting pituitary tumours can expand during treatment with octreotide: monitor for signs of tumour expansion e.g. visual field defects. In patients with carcinoid tumours, octreotide should not be prescribed before excluding the presence of an obstructive intestinal tumour. **Gallstone formation**: Octreotide may reduce gall bladder motility and may lead to gallstone formation in long-term recipients. (Routine ultrasound of the gallbladder is not indicated as it would not affect clinical decision making). **Cholelithiasis-induced pancreatitis** has been reported with long-term treatment. Very rarely, acute pancreatitis has been reported within the first hours or days of treatment. **Altered glucose regulation.** Due to possible inhibitory effects on secretion of insulin and glucagon (both hyperglycaemia and more rarely hypoglycaemia have been reported) In patients with concomitant diabetes mellitus; monitoring of glucose tolerance is recommended and adjustment of antidiabetic therapy may be necessary. **Bradycardia**: In patients without underlying cardiac problems octreotide may lead to a decrease of heart rate without necessarily reaching the threshold of bradycardia. In patients suffering from cardiac disorders prior to treatment, sinus bradycardia may occur. Care should be taken when initiating treatment in patients with bradycardia. Concomitant administration of bradycardia-inducing drugs (e.g. beta blockers) may have an additive effect on any associated slight reduction of heart rate. Dose adjustments of such concomitant medications may be necessary.
Common Drug Interactions	• Drugs mainly metabolised by CYP3A4 which have a low therapeutic index (e.g. carbamazepine, digoxin, warfarin and terfenadine); caution should be exercised during co-administration. • Dopaminergics: octreotide increases plasma concentration of bromocriptine • Ciclosporin: plasma concentration is reduced. • Cimetidine: absorption may be delayed.
Communication	For any queries relating to this patient's treatment with octreotide, please contact the specialist named at the top of this document. **This information is not inclusive of all prescribing information and potential adverse effects.** **Date Prepared: February 2013** **Date of review: February 2016**