BCAP Prescribing and Therapeutics Committee
Shared Care Guidance

Octreotide Depot Injection (Sandostatin LAR®) for the management of Carcinoid Syndrome

Background

Carcinoid is a cancer of the neuro-endocrine system [the part of the body that produces hormones]. It is a rare cancer – incidence 2 per 100,000 population. Carcinoid tumours are slow growing and are commonest in the gut.
Prognosis is generally good. Those tumours which can't be completely removed with surgery cause few problems because of the slow rate of growth. 5 year survival for metastatic disease is 90%.
Carcinoid Syndrome is caused by the tumour releasing hormones [particularly serotonin] into the blood stream. It is seen most often when the disease has spread to the liver.
Symptoms include

- Diarrhoea
- Flushing of the skin
- Wheezing
- Abdominal pain

Carcinoid syndromes can't be cured but can be controlled.

Patients diagnosed with Carcinoid will initially be managed by a secondary care specialist, this may also involve referral to a specialist centre experienced in the management of this rare condition. If the patient is considered suitable for treatment with Octreotide, this will be initiated in secondary care. The patient's response will be monitored and any dose adjustment made. Once the patient has been stabilised on treatment, transfer of care to the GP can be considered.

Treatment Aims

- Octreotide Depot Injection (Sandostatin LAR®) is licensed for the relief of symptoms associated with carcinoid tumours with features of carcinoid syndrome.
- It is not anti-tumour therapy and is not a curative treatment.

Octreotide is a synthetic version of the hormone somatostatin. Somatostatin is produced in various parts of the body. Its action is to prevent the release of other hormones found in the body. This includes those hormones released by the carcinoid tumour.
It is available as a short acting preparation for sub-cutaneous or intravenous administration and as a long acting depot preparation given by deep intramuscular injection.
This shared care protocol refers to the long acting preparation (Octreotide Depot Injection– (Sandostatin LAR®)

Patients who respond to Octreotide experience a marked reduction in symptoms associated with carcinoid syndrome, diarrhoea, skin flushing, wheezing and pain. Carcinoid tumours are slow growing and as such patients can be maintained on treatment for symptom management for some time. Although patients should be reviewed by their secondary care specialist if changes in their condition should occur, it would seem appropriate that the ongoing care of these patients is by their GP. This avoids unnecessary appointments at the hospital often just to get further supplies of medication.

Treatment Schedule

The patient will first be treated with short acting octreotide to assess efficacy.
If efficacious, therapy is switched to Octreotide Depot 20mg every 28 days (given by deep im injection).Response is assessed after 3 months of treatment.
If symptoms are well controlled the dose may be reduced to 10mg every 28 days.
If poorly controlled the dose may be increased to 30mg every 28 days.
The patient should not be considered for transfer to the care of the GP until stabilised on an appropriate dose. The patient should be reviewed by their secondary care specialist every 6 months and by their GP every 3 months or as deemed appropriate by the GP.

The required dose (the GP will be informed of the dose to be prescribed) is administered by intramuscular injection every 28 days.

- Octreotide LAR must only be given by intramuscular injection into the gluteal muscle [It is recommended to alternate sites]. If a blood vessel is penetrated another injection site should be selected.
- No dose adjustments are needed for renal or liver impairment or in elderly patients.
- Treatment should be continued for as long as the patients is responding (-getting relief of symptoms of carcinoid syndrome)
- The patient should be referred back to their Oncologist at the hospital if the GP considers that the dose may require adjustment or if the patient is experiencing unacceptable side effects.
- Octreotide LAR must be reconstituted before administration, follow manufacturers instructions contained in each pack.
- Octreotide LAR injection must be store in a fridge.

Monitoring

- Monitor patient for symptoms relating to carcinoid syndrome [see above] recurrence of symptoms may require dose adjustment.
- Diabetic patient - As insulin secretion can also be affected by octreotide monitor blood glucose levels and adjust anti-diabetic treatment as necessary.
- Octreotide can increase the risk of gall stones. If gall stones suspected refer to patient to an appropriate specialist.

Side Effects (See BNF or SPC)

- Gallstones. If suspected refer to appropriate specialist
- Gastrointestinal effects - Diarrhoea, abdominal pain, nausea, vomiting, flatulence and steatorrhoea. These are usually mild and diminish with time
- Local effects – Pain, redness, stinging or burning at the injection site.
- Impaired glucose tolerance.

Drug Interactions

- Octreotide delays the absorption of Cimetidine
- The SPC advises caution when administering to patients also receiving digoxin, warfarin or carbamazepine as blood levels of these drugs may be increased. Check blood levels and monitor INR as necessary.

Cautions and Special Recommendations

- Experience with octreotide in pregnant or nursing women is not available

Advice to the patient

- Diabetic patients should be warned of the possibility of effects on their blood sugar levels
- Patients should be advised of the need to store the injection in a fridge.
- To contact the GP if they feel their symptoms of carcinoid syndrome are getting worse
- To contact the GP if they feel they are suffering from any side effect they think may be related to the Octreotide injection.

Contact Details
If you require any further information regarding Carcinoid tumours, Carcinoid Syndrome and treatment.

Dr E D Gilby
Consultant Medical Oncologist
Royal United Hospital
Combe Park
Bath BA1 3NG

Telephone 01225 824318
E-mail ed.gilby@ruh-bath.swest.nhs.uk
Fax 01225 824470

Document Prepared By Rosie Simpson
Principal Pharmacist Cancer & Aseptic Services RUH April 2005
In association with Dr E D Gilby.

References
Sandostatin LAR. Summary of Product Characteristics. Novartis Pharmaceuticals. June 2004
www.cancerbacup.org.uk/Cancertype/Carcinoid

For Further information regarding Sandostatin LAR please refer to the Summary of Product Characteristics.