Drug: KETAMINE       Protocol number CV 10

Indication: PAIN IN A PALLIATIVE CARE SETTING NOT RESPONDING TO OPIOIDS AND ADJUVANT THERAPY

General guidance:

This protocol sets out details for the shared care of patients taking ketamine and should be read in conjunction with the General Guidelines for Shared Care. Sharing of care requires communication between the specialist, GP and patient. The intention to share care should be explained to the patient by the doctor initiating treatment. The doctor who prescribes the medication legally assumes responsibility for the drug and the consequences of its use. The prescriber has a duty to keep themselves informed about the medicines they prescribe, their appropriateness, effectiveness and cost. They should also keep up to date with the relevant guidance on the use of the medicines and on the management of the patient’s condition.

Background

The majority of pains associated with malignant disease respond to opioids (sometimes at high doses) with or without adjuvant therapies. A small minority of patients, often those with neuropathic pain, are resistant to such measures, either due to intolerable side effects or lack of effect. These pains have been found to respond to ketamine given sub-cutaneously via a syringe driver at sub anaesthetic doses or orally. Such use of ketamine is not covered by the product licence and should only be initiated by a Consultant in Palliative Medicine. In exceptional circumstances it may be used for chronic pain under the supervision of Palliative Medicine or Chronic Pain.

Responsibilities

A. Consultant responsibilities

1. When treatment is initiated send Shared Care request form with Shared Care Protocol to GP.
2. Baseline and continued monitoring of clinical parameters
3. Initiate therapy following full discussion with the patient of benefits and risks.
4. When a GP positive response to SC has been received and patient has been stabilised send a letter to GP “handing over” the Shared Care of the patient to the GP.
5. Respond to any request from GP to review the patient due to adverse effects of therapy.
6. Advise the GP on continuing or stopping ketamine therapy following medical review of the patient and associated drug therapy
7. Notify GP if patient is failing to attend for appropriate monitoring and advise GP on appropriate action.
B. General practitioner responsibilities

1. Within one week of receipt return the completed Shared Care request form to indicate whether or not willing to undertake Shared Care.
2. Prescribe ketamine as part of the shared care agreement.
3. Monitor the general health of the patient
4. Report adverse effects of therapy to the consultant and the Medicines and Health Care products Regulatory Agency (MHRA).
5. To act on advice provided by the Consultant if patient does not attend for appropriate monitoring.

C. Patient responsibilities

1. Consent to treatment with ketamine.
2. Attend regular appointments with specialist centre and GP.
3. Report any side effects to the specialist or GP whilst receiving ketamine.

Dosage Regimen

Ketamine should only be started in an inpatient unit. Standard accepted practice is to start with 10mg sc stat and then 10mg/hr s/c over 24 hours and increase by 100mg /24 hours increments until benefit is found. It is unusual to require doses greater then 600mg per day.

Ketamine has been used orally usually started at doses of 25-50mgs 4-8 hourly, using the injectable solution. Opioids are usually continued at the previous dose but may need to be reduced if the patient gets good pain relief from the ketamine or shows signs of opioid toxicity.

Dose alterations should be undertaken in the inpatient unit or after outpatient review. Because no information is available on stability, for oral use the concentration should be chosen which allows the vial to be finished quickest. For most oral doses this is the 10mg/ml concentration.

Monitoring

Once stabilised on an effective dose, pain and side effects need to be assessed on a regular basis; as the syringe driver will need changing every 24 hours this may be done by the District Nurse.

The District Nurse should:

1. Daily check on syringe driver for turbidity (clouding).
2. Check the needle site for inflammation.
3. Daily check of patients resting respiratory rate.
4. Daily ask the patient to rate their pain as mild, moderate or severe.

5. Weekly ask the patient if they have had any hallucinations.

6. Weekly check patients B.P.

Reassessment by the Palliative Medicine Consultant will be at least monthly.

**Adverse effects**

Vivid dreams, hallucinations, excessive salivation/secretions and sedation are the most commonly reported problems, though rarely the patient can develop a psychosis. Ketamine is commonly given with midazolam or haloperidol to reduce these effects.

Intracranial hypertension and seizures are absolute contraindications. Hypertension, cardiac failure and previous CVA are relative contraindications.

**Interactions**

Ketamine can be mixed with diamorphine, morphine, haloperidol and midazolam in a syringe driver.

**Special Recommendations**

Ketamine is only available in the community on a named patient basis direct from Parke Davis. Its use must be restricted to the indications given above and should only be initiated by a Consultant in Palliative Medicine.

Ketamine is a POM usually only available to hospitals. It has a recognised potential for abuse but as yet is not a Controlled Drug.

Community pharmacists may have difficulty with supplies. Arrangements have been made with Parke Davis to try and alleviate this problem.

Prior to discharge the hospice/hospital pharmacist will send Park Davis an authorisation form which will also provide details of the community pharmacist nominated by the patient.

Wherever possible the patient will be discharged with 14 days supply to ensure continuity of supply in the community.

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