

PROCEDURE

ORIGINAL DATE: 06/92

Revised Date: 09/02

SUBJECT: FOSCARNET (FOSCOVIR) ADMINISTRATION

PURPOSE: To safely administer intravenous Foscarnet in the home.

GENERAL INFORMATION

1. Foscarnet has been approved by the FDA for treatment of CMV retinitis.
2. The drug is largely eliminated by the kidneys, with the remainder passing into bone. It requires hydration and close monitoring.
3. Patients should be advised that Foscarnet is not a cure for CMV retinitis, and that they may continue to experience progression of their symptoms of retinitis during or following treatment. They should be advised to have regular ophthalmologic examinations. They should be informed that the major toxicities of Foscarnet are renal impairment, electrolyte disturbances, seizures, and that dose modification and possible discontinuance may be required. The importance of close monitoring while on therapy must be emphasized. Patients should be advised that perioral tingling, numbness in extremities or paresthesia during or after infusion are possible symptoms of electrolyte abnormalities. Should such symptoms occur, the infusion should be stopped and the physician contacted immediately before resuming treatment. Hydration adequate to establish and maintain diuresis during dosing should be administered with Foscarnet.
4. Foscarnet should not be used in conjunction with other drugs that may cause the same side effect; these include but are not limited to:
 - Pentamidine
 - Aminoglycosides
 - Loop diuretics
 - * Amphotericin B
 - * Other antivirals
 - * Chemotherapeutic agents
5. The most common side effects of Foscarnet are:
 - Impaired renal function
 - Decreased urine output
 - Malaise and fatigue
 - Headache
 - Thrombophlebitis at infusion site
 - Muscle spasm, numbness and tingling (associated with decreased calcium)
 - * Anemia
 - * Mild tremors
 - * Seizures
 - * General irritability
6. There is no evidence that Foscarnet causes myelosuppression and thus Foscarnet may be administered in conjunction with AZT.

Considerations

1. Patient must receive initial dose of Foscarnet in a hospital or medical setting.
2. Patient should have a caregiver present during each infusion of Foscarnet.
3. Foscarnet must be infused via a pump.
4. Hydration with normal saline before and/or during each dose is recommended to prevent nephrotoxicity.
5. Patient must be weighed weekly as dose is calculated according to weight.
6. Central venous access or a PICC line is the preferred route of administration. If Foscarnet must be infused via a short peripheral or midline catheter, the concentration should not exceed 12 mg/ml (supplied in 250 ml and 500 ml bottles of 24 mg/ml).
7. Recommended lab work twice weekly including CBC with differential, electrolytes, ionized calcium, magnesium, BUN, creatinine and liver functions.
8. The nurse administering/teaching Foscarnet therapy will know approved indications for use, expected therapeutic effects, recommended dosage, side effects and toxic symptoms.
9. LPN's may not administer Foscarnet.

INDUCTION AND MAINTENANCE THERAPY

1. Induction therapy is 60 mg/kg of body weight over 1-2 hours every 8 hours for 2-3 weeks.
2. Maintenance therapy follows induction and is administered once a day. The recommended dose is 90-120 mg/kg of body weight infused over 2 hours.
3. If progression of retinitis occurs while on maintenance therapy, induction therapy may be resumed.

Necessary Equipment	
Foscarnet and hydration solution with Appropriate Vented Pump Tubing	Heparin flush syringe with appropriate dose for type of line
Pump and pole	Tape
Needleless adaptor system	Gloves
Alcohol prep pads	Sharps container
Saline flush syringe	

Procedure

1. Access central line according to established procedure.
2. Attach needleless adaptor to line.
3. Check orders for Foscarnet dose and hydration.
4. Take baseline vital signs and do skilled assessment prior to beginning infusion.
5. Open tubing package, close clamp and attach needleless connector to Foscarnet/Hydration tubing.
6. Spike single bag of hydration and Foscarnet and hang on pole.
7. Prime tubing.
8. Load Foscarnet/Hydration tubing into pump following manufacture's directions.
9. Set pump to deliver dose/volume ordered and rate of infusion.
10. Wipe adaptor cap with alcohol and flush catheter with normal saline.
11. Wipe cap with alcohol and attach needleless adaptor into cap.

12. Turn on pump.
13. Review side effects with patient and caregiver, and action to take should these occur.
14. When Foscarnet and hydration are completed, remove needleless adaptor from cap.
15. Wipe cap with alcohol; flush with saline and heparin as ordered.

AFTER CARE

1. Deposit needles in sharps container.
2. Double bag other equipment for disposal.
3. Document infusion and nay response to the treatment.

NOTE: If Hydration and Foscarnet are not mixed in one bag, follow above procedure