Guidelines for the Use of Ganciclovir (Cytovene®)

Recommended Neonatal Dose, Route, and Interval

- 6 mg/kg/dose every 12 hours for a minimum of 6 weeks
- Administer by IV infusion by syringe pump over 1 hour
- Reduce the dose by 50% for significant neutropenia (< 500 cells/mm³)
- Dosage must be adjusted in renal dysfunction.

Chief Indications

1. Treatment of congenital or neonatal CMV, including pneumonia and disseminated infections

Possible Adverse Reactions

1. Most common and dose-limiting adverse effect is neutropenia; other hematologic side effects include thrombocytopenia and anemia.
2. Less common side effects are CNS-related including confusion, seizures, headaches.
3. Local effects include phlebitis secondary to alkalinity of drug (pH=11.2).
4. Other effects include drug fever, rash and elevation of liver function tests.

CONTRAINDICATIONS/PRECAUTIONS:

1. Hypersensitivity to ganciclovir or acyclovir
2. ANC less than 500/mm³ or platelet count less than 25,000/mm³

Nursing Implications

1. Must use Phaseal for administration and follow hazardous medication precautions
2. IV ganciclovir solutions are stable for 24 hours
3. Do not refrigerate

Special Considerations and Calculations:

1. Avoid direct contact of skin or mucous membranes with diluted solution
2. Wear gloves for administering drug and contact with urine contaminated items
3. Dispose of all syringes, unused medication, tubing, and any urine contaminated items in (becca – please verify the appropriate bin for hazardous waste for oncology medications – GCV is not truly an oncology medication, but we treat it as such d/t teratogenic effects).
4. Infuse through a large vein with adequate blood flow
5. Maintain adequate patient hydration
6. Monitor CBC every 2 to 3 days during first 3 weeks of therapy, weekly thereafter if stable
7. Monitor urine output, serum creatinine, LFTs.

References:
1. Neofax 2010

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