### West of Scotland ORAL/ OTHER ROUTE Drug Monographs

## **Phenytoin**

FORM Oral suspension 30mg/5ml (Sugar free/ alcohol free)

**INDICATION** Control of seizures

#### **DOSE RANGE**

| AGE               | DOSE             | FREQUENCY   | ROUTE |
|-------------------|------------------|-------------|-------|
| Birth to 6 months | 2.5mg to 5mg/kg* | TWICE daily | Oral  |

<sup>\*</sup> Maintenance dose commenced 12 hours after loading dose. Initial dose may be adjusted according to levels and response.

#### CAUTIONS, CONTRA-INDICATIONS AND SIDE EFFECTS

- See Summary of Product Characteristics and most recent edition of BNF for Children (links below)

# SPECIAL MONITORING REQUIREMENTS

- Time to steady state 7-14 days (highly variable)
- Target Blood concentration

6-15mg/L (neonate – 3months) 10-20mg/L (3 months – 18 years)

- Ideally a trough level should be taken immediately before the next dose but timing of levels is not critical.
- Consult pharmacist for advice on increasing maintenance dose as kinetics of phenytoin in neonates can be unpredictable and serum levels can rise rapidly even following small dose increases.

#### **FURTHER INFORMATION**

- Oral absorption in neonates is unpredictable.. Ideally milk feeds should be withheld for at least 30 minutes before and after phenytoin administration. Give with water to increase absorption
- When serum albumin is low or in situations where there is altered protein binding (e.g.renal failure), the therapeutic range should be adjusted or free phenytoin level measure (target 1-2mg/L). Consult pharmacy for more information and dosing advice
- Phenytoin levels may be increased in cooled infants (therapeutic hypothermia)
- Oral and IV doses are NOT equivalent. To convert a baby from oral to IV multiply the oral dose by 1.1

LICENSED STATUS Unlicensed Special

LINKS BNF for Children: / Electronic Medicines Compendium

APPLICABLE POLICIES West of Scotland Neonatal Guidelines:

Consult local policy if applicable

| Document Number: | 001                 | Supersedes:  | Nil            |
|------------------|---------------------|--------------|----------------|
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Dose may vary depending on indication, age, renal function, hepatic function, and concomitant medications. This monograph should be used in conjunction with the package insert, BNF for Children, and Summary of Product Characteristics. For further advice contact your clinical pharmacist or pharmacy department.

Neonatal

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