Lab Dept: Chemistry

Test Name: DILANTIN LEVEL

General Information

Lab Order Codes: DIL

Synonyms: Total Phenytoin; DPH; PHT; Cerebyx®

CPT Codes: 80185 – Phenytoin, total

Test Includes: Dilantin/Phenytoin concentration in ug/mL

Logistics

Test Indications: Useful for therapeutic drug monitoring (TDM). Dilantin is used in the treatment of primary or secondary generalized tonic-clonic, partial, partial-complex seizures and status epilepticus. Once absorbed, the drug is tightly bound to protein.

Lab Testing Sections: Chemistry

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 2 hours

Special Instructions: Post load – Peak: 1 hour after end of infusion. Trough level – Should be drawn just before the next dose.

Specimen

Specimen Type: Blood

Container: Green top (Li Heparin, no gel) tube preferred

Alternate tube: Red top (plain, no gel) tube

Draw Volume: 0.6 mL blood

Processed Volume: 0.2 mL serum/plasma

Collection: Routine blood collection. Mix tubes containing anticoagulant by gentle inversion.
**Special Processing:**
Lab Staff: Centrifuge specimen, remove serum/plasma aliquot into plastic sample cup. Analyze sample immediately or store at refrigerated temperatures.

**Patient Preparation:**
None

**Sample Rejection:**
Mislabeled or unlabeled specimen

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**Interpretive**

**Reference Range:**
Therapeutic concentration: 10 - 20 ug/mL

**Critical Values:**
>30 ug/mL

**Limitations:**
N/A

**Methodology:**
Particle enhanced turbidimetric inhibition immunoassay (PETINIA)

**References:**
PTN Flex® reagent cartridge insert sheet Siemens Healthcare Diagnostics Inc (2008-02-29) 717064.001 – US, Rev F


Biorad Liquichek® Unassayed Chemistry Control (Human) product insert, Irvine, CA

**Updates:**
5/1/2005: Critical value changed, previously listed as >25 ug/mL.
2/8/2016: Update alt tube types