
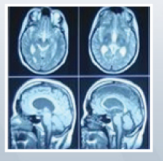


Rifampin Serum/Plasma Analysis – Change in Service

Date Effective: August 21, 2013

Background Information:

Mayo Laboratories has recently indicated that Focus Diagnostics will no longer provide rifampin (serum/plasma) testing. This has prompted a change in referral of samples for testing to NMS Labs.

There is no consensus on the utility of measuring serum/plasma rifampin levels.

Analysis of serum/plasma rifampin levels should be isolated to cases where:

- response to therapy is slower than expected
- when malabsorption may be suspect
- drug resistant tuberculosis is present
- hepatic dysfunction is playing a role in treatment failure

In order to ascertain delayed absorption versus malabsorption, drug levels following oral dosing should be obtained at 2 hours and 4-6 hours after dose. There is no consensus on relationship between peak plasma/serum rifampin levels and outcomes. However, a dose increase is recommended if peak level is less than 6 µg/mL.

Peak level: A **fasting** sample should be collected 2 hours post dose following oral dosing and 45 minutes following IV infusion

Trough levels: Not recommended

Change in Test Procedure:

Please note the following associated with this change in referral service

Reference values:

- Peak plasma concentrations averaged 16 ± 11 mcg/mL (range 5 to 27 mcg/mL) following 6 weeks of daily administration of 600 mg oral rifampin.

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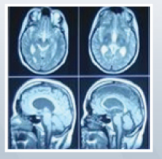


- Comparable peak plasma concentration achieved with single 600 mg intravenous administration of rifampin
- Plasma concentrations 8 hours after a single intravenous administration of 600 mg rifampin averaged 5.8 ± 3.3 mcg/mL on day one and 2.6 ± 1.9 mcg/mL on day seven.
- Time to maximum concentration is significantly delayed and reduced for oral dosing given after the ingestion of food.

Source: Rifampin PI, Sanofi-Aventis, 2013; Ruslami, R, et al., Antimicro Agents Chemother 51(7):2546, 2007.

Reporting limit: > 0.5 mcg/mL

More information:

https://apps.sbgh.mb.ca/labmanualviewer/viewTest.action?url=/test/14240

DSM Contact Information:

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