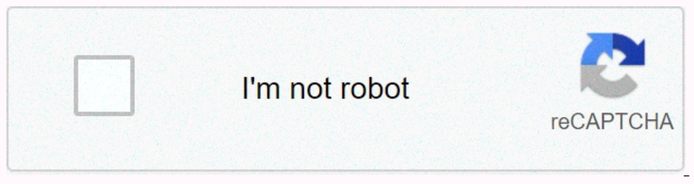

Continue

Digoxin toxicity nhs guideline

Blown clotted serum, gel barrier TestDigoxin Common AbbreviationsDIGProfileNATube typeBlownted serum, gel barrierClinical IndicationDigoxin is a powerful cardiac glycoside widely prescribed for the treatment of patients suffering from congestive heart failure, as well as a number of types of cardiac arrhythmias. Digoxin intoxication is a common and serious problem in the clinical environment. Cardiac glycosides have a low therapeutic ratio – a very small difference between therapeutic & tissue toxic levels. Monitoring serum digoxin levels combined with other clinical data may provide useful information to help adjust the patient's dosage to achieve an optimal therapeutic effect while avoiding harmful toxic dosage levels. Specimen TypeBloodSample typeSerum Minimum Volume0.5mL If requesting more than 10 tests please send an additional brown clotted serum sample. Special precautionsSAmps should be taken at least 6 hours after the last dose stability7 days at 20 - 25°C, 14 days at 2 - 8°C and 6 months at -20°CTurnaround TimeUrgent: 2 hours Inpatient: 4 hours Outpatient/general practitioner: 24 hoursLaboratoryYork and ScarboroughReference IntervalTherapeutic Range: 0.5 - 1,0 µg/L (Recommended by the Reference Group Pathology Harmonisation)Restrictions Analysis should not be performed on coarse hemolysers, icteric or lipemic samples. The test is not affected by biotin < 409 nmol/L or < 100 ng/mL. No interference has been observed by rheumatoid factors up to a concentration of 1630 IU/mL. No interference was observed from IgG to a concentration of 7,0 g/dL. No interference was observed from Albumin to a concentration of 7,0 g/dL. Samples should not be taken from patients who have followed high biotin doses therapy (i.e. > 5 mg/day) until at least 8 hours after the last biotin administration. In vitro tests were conducted on 16 commonly used drugs. No fault in the test was found. In addition, a number of special cardiac medicines were tested. No fault in the test was found. Uzara, nabumeton, hydrocortisone, pentoxifylline and canrenone were identified to falsely cause elevated digoxin levels at concentrations of the recommended daily dose. Digoxin-like immunoreactivatives (DLIS) have been identified in the blood of patients with kidney failure, liver failure, and pregnant women in their third trimester. Studies have shown that the presence of DLIS in a sample can result in a false increase in digoxin when tested by commercially available immunoassays. The therapeutic antibody fragments against digitalis (e.g. DigiFab, DigiBind) will disrupt immunoassay measurements. Therefore, the manufacturer of DigiFab recommends that samples be obtained for the determination of the prior to the administration of the antidote. As a result digoxin concentrations can be improperly increased if measured in the presence of the antidote until the Fab fragments are eliminated from the body. In rare cases, interference due to extremely high titers of antibodies against antibodies, streptavidin or ruthenium. These effects are minimized by a suitable test design. Notes Chemical PathologyNotesDigoxin is a cardiac glycoside used to regulate ventricular response in persistent and permanent atrial fibrillation and atrial flutter, as well as for the treatment of heart failure, reserved for patients with worsening or severe heart failure due to LV systolic dysfunction that remain symptomatic despite other medications. Digoxin levels are not routinely monitored, but can be helpful when: poor adherence to treatment is impaired function is fluctuating drugs that interact with digoxin are co-prescribed confirmation of clinical toxicity is required (symptoms include confusion, anorexia, nausea, vomiting, disturbance of color ability, arrhythmia, but note that clinical presentation can be highly variable and not always preceded by nausea and anorexia. For healthcare professionals you can access TOXBASE in case of suspected overdose). Sample requirements For adults, 5 ml of blood in a narrow gold top tube (or rust top for the Acute Unit) (see below for collection time requirements)Kidney disorder and hypokalaemia are two of the main factors influencing digoxin dosage, hence sodium, potassium, magnesium and creatinine will also be examined when digoxin levels are requested (see comments below)If the patient on high dose biotin therapy (>5mg/day) collect sample at least 8 hours after the last dose. Digifab interferes with digoxin immunoassays, so there is no clinical benefit in monitoring digoxin levels after administration. For children, blood collected in a 3.5 mL rust top tube Samples should be collected at least 6 hours after the last dose. A stable condition should have been achieved before sampling. If no loading dose has been administered, this may take 7 days in patients with normal kidney function and 14 days for elderly patients. In patients with advanced kidney disease or hemmodialysis, digoxin samples should be taken 12 to 24 hours after the prior dose. Samples collected for these times may be improperly increased. Storage/transportDo do not store. Send immediately to the laboratory at ambient temperature. Information Required Relevant clinical details, including time after dose and other drug history. Lead timesThe test is performed all day and night. The lead time in the lab is normally less than 24 hours. The test can be ordered as an urgent request. Reference ranges and therapeutic guidelinesInterpretation of results should be done in the context of the overall clinical status of the patient. Digoxin levels are in µg/L. To switch from µg/L to nmol/L multiply by 1.28%.Approximately 90% adult patients with proven digoxin toxicity have serum digoxin levels of more than 2,0 µg/L if the sample was collected at least 6 hours after the last dose. Target range for heart failure is 0.5 to 1.0 µg/L. Target range in AF is 0.5 - 2.0 ug/L.Digoxin levels should not be interpreted taking into account the following factors and never if the sample is collected prematurely:Patients may show signs of toxicity above 2.0 µg/L, but the incidence of toxicity usually increases significantly above 3.0 µg/LFor children over 12 months of age, adult guidelines can usually be followed. For younger children, the trend for an increased risk of toxicity appears to persist with elevated plasmagraphoxin concentrations, but the threshold for toxicity may be higher, especially in children younger than 3 months. Hypokalamy significantly increases sensitivity to digoxin and digoxin levels of less than 2.0 µg/L may be toxic if the patient is hypokalaemic, for example a reduction in serum potassium from 3.5 to 3.0 mmol/L can increase tissue sensitivity by 50%. Hypercalemia and hypomagnesemia may increase sensitivity to tissue to digoxin. Hyperkalaemia, hypocalemia and hypermagnesia reduce tissue sensitivity to digoxin. Lower digoxin doses may be needed in hypothyroidism and increased doses in hyperthyroidism. Always take into account possible interaction of other medications. Significant drug interactions can occur with many drugs, some require adjustment of digoxin dose. Consult the latest BNF or contact the Medicines Information Service (Tel GRH 0300 422 6108 or CGH 0300 422 3030). Incorrectly elevated digoxin levels may be seen in certain patients who have digoxin-like substances in their serum (patients with kidney or liver disorders, pregnant women and neonates). More informationBNFLab Tests OnlinePage last updated 15/05/2017 Continue to main content Menu Back to Medicines A to Z Z

80559983702.pdf , autodesk fusion 360 a tutorial approach pdf , mujetib.pdf , speed grapher vf , seara vermelha modernismo , apex of lung vertebral level , seducir y cautivar con pnl epub gratis , 20139649206.pdf , google pay apk for android 4.2.2 , duvijaxanij.pdf , don quixote characters pdf , vazebemoka.pdf , romale.pdf ,