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BACKGROUND AND AIM: This study investigates error sources in a patient with total bilirubin negativity through reflective tests and contributes to early diagnosis by studying additional tests from the existing sample in the laboratory without requesting a new sample.
MATERIALS and METHODS: Although the total bilirubin measurement of a 59-year-old male patient with complaints of dyspepsia, flank pain, and fatigue were repeated and studied with serial dilution, it could not be reported due to the inconsistency in results. Hemolysis, lipemia, and icterus were not detected in the serum, but deep anemia and high erythrocyte sedimentation rate were observed in his other biochemistry results. Suspecting paraprotein interference, total protein was studied as a reflective test on the patient whose results were found to be high by serial dilution since the result was above the upper limit of the device to read. By consulting the clinician, serum protein electrophoresis, serum immunofixation electrophoresis, serum kappa, lambda light chain, quantitative IgG, IgA, and IgM were studied from his sample as reflective testing.
RESULTS: After observing an increase in monoclonal protein due to serum protein electrophoresis and high rates in the measurement results of IgG and free kappa light chain protein, the patient was contracted and referred to the hematology clinic.
CONCLUSION: The case in which we detected paraprotein interference was quickly diagnosed with Multiple Myeloma with reflective tests and early treatment was started. In this case, reflective testing plays an essential role in diagnosis processes as well as contributing to clinician and patient satisfaction.
Keywords: reflective test, paraproteinemia, total bilirubin, interference

S103
INFLAMMATORY SIGNAL TRANSDUCTION PATHWAYS INDUCED BY PRILOCAINE TOXICITY İN HUMAN RETİNAL PİGMENT EPİTHELİAL CELLS

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BACKGROUND AND AIM: Prilocaine (PRL) is a commonly used local anesthetic. Despite the successful use of regional anaesthesia for intraocular surgery, toxic effects of local anesthetics can occur on the retina in cases of accidental intravitreal injection. This study examined signal transduction pathways activated by PRL toxicity and determined the protective role of nitric oxide synthase-2 (NOS2) inhibition in human retinal pigment epithelial (ARPE-19) cells.
MATERIALS and METHODS: Toxicity analysis (MTT test) was performed to determine both the toxic dose of PRL and the protective efficacy of Asperglaucide (ASP), a NOS2 inhibitor. Nuclear factor kappa B p65 (NF–kB p65), phosphorylated NF-kB p65, phospho AKT, NOS2, nitrotyrosine, cleaved caspase-3 protein levels were evaluated by immunofluorescence staining and/or western blot analysis. Interleukin-6 (IL-6) and nitrated protein levels were quantified by immunoassay, while caspase -3 activity and nitrite/nitrate levels were measured via a fluorometric method.
RESULTS: It was observed that NF-kB p65, phosphorylated NF-kB p65 and phosphorylated AKT were significantly increased in PRL toxicity. Likewise, IL-6, NOS2, nitrite/nitrate and nitrotyrosine levels were significantly higher in PRL-treated cells compared to controls. Application of ASP to PRL treated cells significantly reduced NF-kB p65, phosphorylated NF-kB p65 and phosphorylated AKT to basal levels. IL-6, NOS2, nitrite/nitrate and nitrotyrosine levels were also considerably decreased following ASP treatment in PRL-induced toxicity. No activation was observed in the caspase-3-dependent apoptotic pathway.
CONCLUSION: NF-kB p65-mediated signal transduction pathway is activated due to PRL toxicity and can be down regulated by ASP. Supported by a grant from TUBİTAK #121S194 and BAP# TYL-2022-5989.
Keywords: Prilocaine, Nuclear factor kappa B P65, Nıtrıc oxide synthase-2

S104
REASONS AND DISTRIBUTION OF URINE TOXICOLOGY SCREENING TESTS IN ANTALYA

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BACKGROUND AND AIM: Drug and substance analysis in urine samples is used in medical diagnosis and treatment, legal screening, social screening. Urine integrity tests should be performed before the analysis of the substance in the urine. Urine integrity tests include creatinine, density, pH and nitrite parameters. If urine integrity is impaired, it is not accepted for substance analysis. In this study, we examined the reasons for rejection and distribution of samples rejected because they did not comply with urine integrity in urine toxicology screening tests at Antalya Training and Research Hospital.
MATERIALS and METHODS: We retrospectively evaluated the samples for which urine toxicology screening test was requested during the 7-month period between January and July 2022 in our hospital. Analyzes were measured by immunoassay method on the Biolis 50i device.
RESULTS: When the urine toxicology screening tests were examined, 12.2% of the samples accepted to the laboratory were rejected because they did not comply with the urine integrity tests. When the reasons in the rejected samples are evaluated; low creatinine results 52%, high creatinine results 3%, 31% not meeting density criteria, insufficient sample 3%, other causes 10%.
CONCLUSION: When the rejected samples are evaluated because of the urine integrity test, the majority of them are those with low creatinine results and those do not comply the density criteria. This brings us to mind the possibility of patients drinking a lot of water before giving the sample or mixing water in their urine during sample collection. However, this study demonstrates the importance of performing integrity test before urine substance analysis.
Keywords: Toxicology, Screening, Urine Integrity Tests

S105

S106
SERUM CINGULIN LEVELS IN AUTISM SPECTRUM DISORDER IN CHILDREN

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