

An Interpretation of Laboratory Examination Values

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So far, the skill that pharmacists use pharmaceutical (or pharmacokinetics) values and contribute to drug therapy has not existed except therapeutic drug monitoring (TDM). Therefore, it is necessary to develop a second skill which is different from TDM quickly (the skill which does not depend on only blood concentration of a drug). Then, we have developed the search method in the serum to easily find pharmacokinetic changes of protein binding for an improvement of the pharmacist skill. The method can estimate the diachronic change factors to monitor diachronic changes of binding affinity of respective binding site on human serum albumin (HSA) and α_1 - acid glycoprotein (AGP) in patient serum (The binding affinities of binding sites can be estimated to determine the free concentrations of site probes) and adding to values of HSA, AGP, free fatty acid, BUN and CRP etc. as laboratory examination values. The most important feature of the method is constructed with the combination between the pharmaceutical values getting from the monitoring of the free concentrations of the site probes and the laboratory examination values. Moreover, the method has the high possibility that an appropriate administering design can be planned for the drug that protein binding affinity is high and distribution volume is small.

In here, we describe the outline of the method, the dosage plans of analgesic effect enhancement on the basis of the pharmaceutical values, and the interpretation of laboratory examination values which has a close relation to serum protein binding of drugs.