

บทคัดย่อภาษาอังกฤษ (Abstract)

Optimum phenytoin dosing for individual patient is difficult because of its non-linear kinetics and narrow therapeutic range. Thus, therapeutic drug monitoring (TDM) of serum phenytoin concentration is usually required to ensure maximum effective and safety use of phenytoin. However, inappropriate TDM can worsen outcome of therapy and lead to wasteful expenses. This study was conducted to study the appropriateness of phenytoin level monitoring in hospitalized patients with epilepsy in one tertiary care center.

The result showed that 81.5% of the total 27 phenytoin level determinations in 19 patients had an appropriate indication, 33.3% of those were sampled correctly and appropriate dose adjustment were performed 92.6%. Only 29.6% of phenytoin levels were considered appropriate in overall criterias. It was noted that the inappropriateness occurred mostly in the sampling process. The study suggests the need for measures to reduce inappropriate monitoring which may result in considerable cost reduction and maximum usefulness of TDM.