

# Barbiturates

## General:

Barbiturates are used as sedatives, hypnotics, as injectable anesthetics, as antiepileptics and as functional antagonists in intoxication with convulsive agents (e.g. DDT, strychnine) or after over-dosage of local anesthetics. Effective substances are thiopental or phenobarbital. Side effects of overdosage are sleepiness during the day, disequilibrium, ataxia but also gas-trointestinal pains and skin reactions (edema, exanthema, exfoliative der-matitis).

Symptoms after frequent barbiturate abuse are over-excitability, tremor, fear, cramps and toxically conditioned psychoses (delirium tremens). Barbiturate intoxication as a suicide condition presents with unconsciousness, breath and cardiac arrest. Due to unequal compartmental distribution in the tissue and vascular system intermittent waking periods can occur. The barbiturate resorption occurs in the stomach, the renal elimination can be accelerated by alkalyzing the urine with NaHCO<sub>3</sub>.

The following tests are available:

- **Barbiturates in serum**

Indication: Therapy monitoring

Material: 2 ml serum

TAT: 7-10 days\*

Method: HPLC

Units: qualitative

- **Barbiturates in urine (qualitative) (see Drug Screening)**

Indication: Polytoxicomania, intoxication

Material: 10 ml urine

Stability: Urine specimen can be stored at 2 to 8°C prior to assay, For prolonged storage specimen may be frozen and stored below -20°C.

TAT: same day, FML

Method: EIA

Units: qualitative

Ref.- range: negative

- **Barbiturates in urine (quantitative)**

Indication: Confirmatory test for positive screening results

Material: 10 ml urine

TAT: 7-10 days\*

Method: GCMS

Units: see report

Ref.- range: see report

For complete list of laboratory test offered at Freiburg Medical Laboratory, please visit  
<http://www.fml-dubai.com/parameter-listings/>