Atenolol

General:

Atenolol is a selective β1 receptor antagonist, a drug belonging to the group of β-blockers, a class of drugs used primarily in cardiovascular diseases. Introduced in 1976, atenolol was developed as a replacement for propranolol in the treatment of hypertension. The drug works by slowing down the heart and reducing its workload. Unlike propranolol, atenolol does not pass through the blood-brain barrier thus avoiding various CNS side effects.

The maximal serum concentration is 2 to 4 hours after oral dosing (time elapsed before maximal concentration in the blood plasma is reached). The mean elimination halflife is 6 hours. However, the action of the usual oral dose of 25 to 100 mg lasts over a period of 24 hours.

Atenolol is a hydrophilic drug. The concentration found in brain tissue is approximately 15% of the plasma concentration only. The drug crosses the placenta barrier freely. In the milk of breastfeeding mothers, approximately 3 times the plasma concentrations are measured. Atenolol is almost exclusively eliminated renally and is well removable by dialysis. A compromised liver function does not lead to higher peak-activity and/or a longer halflife with possible accumulation.

Indication:	Therapy monitoring
Material:	1 ml serum
TAT:	7-10 days*
Method:	HPLC
Units:	µg/l
Ref.- range:	100-1000

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

Updated 18/03/2025