Beta Crosslaps

General:

Type I-collagen contributes more than 90% to the organic matrix of bone and is synthesized predominantly in the bone (osteoblasts). Type I-collagen is degraded during bone resorption (osteoclasts) and small peptide fragments reach the blood and can be detected in serum as crosslaps. Thus the marker helps to recognize increased osteoclast activity or increased bone resorption, for example in osteoporosis. Similarily, crosslaps monitoring can be used in anti-resorptive treatment of patients with metabolic bone diseases.

The measurement of β-crosslaps is indicated for risk assessment in post-menopausal women. Bone mineral density measurement and subsequent follow-ups are recommended if elevated levels are detected. Crosslaps as well as procollagen-I-propeptide are also prognostic markers in the pretherapeutic estimation of treatment success of combined radio- and bisphosphonate therapy in patients with bone metastases.

A significant decrease in serum β-crosslaps reflects the therapeutic success of an antiresorptive treatment. The β-crosslaps decrease in serum is more significant than the urine excretion of deoxypyridinoline or pyridinoline cross-linked C-terminal telopeptide of type I collagen.

A non-significant decrease in serum β-crosslaps indicates an ineffective treatment which may be due to noncompliance, inappropriate medication etc.

Indication:	Osteoporosis, suspicion of increased osteoclast activity
Material:	1 ml EDTA Plasma
Preanalytics:	due to significant circadian rhythm, morning blood collection (not after 9am) is recommended! Fasting.
TAT:	7-10 days*
Method:	ECL
Units:	ug/l
Ref.- range:	age and gender dependent, see report

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

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