COLLAGEN CROSS-LINKS

Also known as:

Urine total pyridinoline and deoxypyridinoline

Relevant disorders

For the differential diagnosis of *PLOD1* defects (EDS Type VI) only.

Indication for Test

The collagen cross Links assay is for the diagnosis of defects in the enzyme lysyl hydroxlase (*PLOD1*) which is a cause of Ehlers Danlos Syndrome (EDS) kyphoscoliotic type.

Methodology

Reverse phase HPLC with fluorometric detection

Sample requirements

1ml aliquot of urine

- Adults; a 2-hr morning urine sample (after the first void discarded)
- In children; at random urine during the day is acceptable.

Protect samples from light.

If delay in posting store sample at -20 ˚C and send 1st class post.

Turn Around Time

4 – 6 weeks

Transport information/Contact details

Send by first class post to:

Department of Clinical Chemistry
Sheffield Children's NHS Foundation Trust
Western Bank, Sheffield
S10 2TH, UK

Dr Jane Dalley (Clinical Scientist)
0114 2760972

Reference Ranges

Interpretation is provided with the report.

References

- Marius E. Kraenzlin, Claude A. Kraenzlin, Christian Meier, Cecilia Giunta, and Beat Steinmann. (2008). Automated HPLC Assay for Urinary Collagen Cross-links: Effect of Age, Menopause, and Metabolic Bone Diseases

- Panteghini M, Pagani F (1996): Biological variation in urinary excretion of pyridinoline cross-links: recommendations for the optimum specimen. Annals of Clinical Biochemistry 36:36.