

Estrone E1

General:

Estrone belongs to estrogens. It is formed predominantly by transformation of androstendione in the ovary by aromatase. The cycle course of estrone in fertile women is parallel to estradiol. Estrone usually decreases in the menopause similar to estradiol. The E1 concentration can rise in certain constellations up to 2 to 3-fold of the normal: e.g. in overweight women a significant conversion of androgen in peripheral fatty tissue can be observed; in case of PCO syndrome an increased formation of E1 in the ovary from androstendione is observed.

Influences on estrone during Hormone Replacement Therapy (HRT): By an oral supply of estradiol or estradiol-conjugates unphysiologically high E1 levels can be observed. This increase is not a result of peripheral aromatizing of androgens, but can be explained by aromatizing of estradiols in the intestine, the intestinal mucosa and during the first liver passage.

In oral HRT increased E1 levels can cause the following clinical disorders: edemata, mastodynia, sweating, hot flushes, smear bleedings. In this case changing to transdermal substitution is discussed.

Indication: In case of suspicion of PCO: E1 together with LH, FSH, E2 and androgens

Material: 2 ml serum

TAT: 7-10 days*

Method: RIA

Units: pg/ml

Ref.- range: see report

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