

THE FERTILITY CENTER OF OREGON

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MIDLUTEAL ENDOCRINE EVALUATION

What is it? The midluteal endocrine evaluation (MLEE) is a group of blood tests which are drawn one week after ovulation to detect hormonal problems which may cause female infertility. One blood sample is drawn on the designated morning and is then tested for thyroid, prolactin, and progesterone levels. These three hormonal systems must be normal for healthy ovulation and pregnancy to occur.

How do I schedule the MLEE? The MLEE must be timed as accurately as possible by using the OvuKIT LH kit. You will be asked to call the office when your menstrual period starts in order to be instructed on when to start the LH kit. We strongly recommend that you take your basal body temperatures (BBTs) during this cycle as this may also assist us in accurately scheduling of the MLEE. After you have your LH surge, you should call Sharon at our office with your results and you will be given a date for the MLEE blood test. Please note that eating breakfast and breast stimulation may falsely elevate prolactin levels. In order to avoid this problem, we recommend that you abstain from intercourse for 12 hours before the MLEE and drink only water on the morning prior to your blood test.

What are the MLEE tests? There are actually four separate tests which are done on one blood sample. The thyroid tests include *serum free thyroxine (free T₄)* and *thyroid stimulating hormone (TSH)*. The serum free thyroxine measures hormone production from the thyroid gland and the TSH measures a stimulating hormone to the thyroid from the pituitary gland in the brain. *Prolactin* is another pituitary hormone and is the hormone responsible for stimulating milk production by the breasts (i.e. breast feeding). *Progesterone* is the hormone produced by the corpus luteum or egg capsule in the ovary after ovulation has occurred. This hormone is necessary to stimulate the endometrium or inside lining of the uterus to develop properly so that the fertilized egg will implant in the uterus and grow normally.

When will I get the results? The MLEE blood tests usually take about 10-14 days to complete. We ask you to call us with the date of onset of your next menstrual period because timing is critical in the interpretation of the prolactin and progesterone values. We will usually notify you of all the MLEE results within 2-3 weeks or at your next office visit. If you do not hear from us by three weeks, please call Sharon at our office.

What if any of the tests are abnormal? If any of the MLEE tests are abnormal, you may be asked to repeat them in the next cycle for confirmation or clarification of the problem. Abnormal thyroid tests are usually corrected easily by replacement thyroid hormone pills. Elevated levels of prolactin can be corrected to normal by a medication. Inadequate progesterone levels can be treated with progesterone vaginal suppositories or fertility medications such as CLOMIPHENE (CLOMID or SEROPHENE).