

GUIDELINES FOR SERUM HUMAN CHORIONIC GONADOTROPHIN (HCG) AND PROGESTERONE MEASUREMENT IN EARLY PREGNANCY

Serum human chorionic gonadotrophin (HCG) measurement may be requested in early pregnancy for a variety of reasons. With a few exceptions serum HCG measurement is **not indicated** for the confirmation/exclusion of pregnancy. Should chemical confirmation of pregnancy be required, in the majority of women a urine pregnancy test (dipstick or laboratory) is satisfactory. The majority of tests undertaken will be associated with the management of early pregnancy. Serum HCG measurement is also justified when a female patient of child-bearing age requiring surgery is anuric.

In those patients where a pregnancy sac is not visible by abdominal or transvaginal ultrasound, but the patient has a positive pregnancy test (pregnancy of unknown location, PUL), measurement of serum progesterone in addition to HCG on the initial sample is also indicated. This is used to determine frequency and type of follow up. Requests not clearly from Early Pregnancy Unit (EPU) must be vetted by the Duty Biochemist.

The use of progesterone in the EPU should reduce the number of follow up visits for patients with pregnancies of unknown location without missing clinically significant ectopics. It can also help to separate those with resolving pregnancy from those with abnormal pregnancy needing intervention. It should only be taken after a diagnosis of PUL has been made on scan

Management of Patients in Early Pregnancy

- suspected ectopic pregnancy
- inconclusive ultrasound scan result – with pregnancy of unknown location (PUL)
- complete miscarriage
- threatened miscarriage
- delayed/incomplete miscarriage

A rapid turnaround time (2-4 hours) is usually restricted to patients with suspected ectopic pregnancy, PUL or complete miscarriage.

- HCG and progesterone must be requested by a member of the gynaecology team. These requests may come from A and E or EPU, depending on where the patient presents, and the time of day.
- Progesterone measurement is only required for management of PUL on the initial sample, and must only be requested by the EPU. The EPU at K&CH only sees patients with a confirmed intrauterine pregnancy, so will not be requesting progesterone.
- Progesterone measurement will not usually be required outside the opening hours of the EPU – Monday-Saturday at WHH and QEQMH. Results must be available before 15:00.

All samples must arrive at the laboratory (WHH/QEQMH) by 15:00 to ensure same day availability of results.

Patients with suspected/known hydatiform mole

Samples for HCG measurement in these patients will be sent to Charing Cross Hospital for analysis.

The content of this document including the requirement for progesterone measurement has been discussed and agreed with Miss Zoe Woodward, Consultant Obstetrician and Gynaecologist, Lead for EPU and GAU, July 2021. Copies of correspondence are held on the shared drive.