
THE SIGNIFICANCE OF BLEEDING IN EARLY PREGNANCY AS EVIDENCED BY THE MALE FROG PREGNANCY TEST¹

WYNNE M. SILBERNAGEL, M.D., JAMES B. PATTERSON, M.D.,

AND

ROBERT F. PICKETT, M.D.,

Columbus, Ohio

The above title was taken from an article by Rutherford, published in 1942 (1). The words "male frog pregnancy test" have been substituted for "decidual biopsy."

Wiltberger and Miller in early 1948 presented a simple method for the test of the early diagnosis of pregnancy. A few months later the same method was reported by Robbins and Parker (2). The test reported by these men may be performed by any practitioner in his office, home, or hospital. It is simple to do, is accurate and inexpensive, (3). Secondly, it may be used to differentiate between threatened and incomplete abortion.

The threatened abortion rate is 16 per cent or higher, (4). If it were possible to differentiate between the patients with inevitable abortions and those with threatened abortions, the attending physician could manage each patient more intelligently. The patients with inevitable or missed abortions, if diagnosed early, would be saved long periods of bed rest and valueless medication. Patients evidencing threatened abortions would receive proper treatment, and a pregnancy which might otherwise have been lost, either from lack of therapy or by the institution of active treatment to evacuate the uterus, might be salvaged.

In the majority of cases the male frog pregnancy test differentiates in a short time between threatened abortion and inevitable, or missed abortion. In some patients the test is negative almost immediately after the onset of uterine bleeding, but becomes positive again within twelve to twenty-four hours. Hence, in the absence of cervical effacement, dilatation, and excessive uterine bleeding, conservatism may be employed and the test repeated.

While waiting to repeat the test, any of the accepted forms of anti-abortive therapy may be carried out. If the second test is negative, only twenty-four hours, at the most, will have been lost by the patient. If the second test is positive, she has been given every possible chance to continue her pregnancy.

¹From the Division of Obstetrics, White Cross Hospital, Columbus.

We have used this test in 16 patients presenting the symptoms of threatened abortion, viz., cramps and uterine bleeding, or spotting. In six of these patients we found that the abortion was threatening only, and prompt anti-abortion therapy produced a continuation of pregnancy. By the test ten patients were found to have either inevitable or missed abortions, and they were treated accordingly. In these patients the test was always repeated at least once in a period of 12 to 24 hours.

One of the big advantages of the male frog pregnancy test is the rapidity with which the test becomes negative after the abortion becomes inevitable. With the Asheim-Zondek or the Schneider-Friedman tests, the persistence of the positive reaction does not necessarily imply that the embryo is still living, (5). The pregnancy reaction may persist 7-10 days after the termination of a pregnancy. In the male frog test it becomes negative within 10-12 hours, (6).

We believe that by the use of the male frog pregnancy test any physician, without the help of any laboratory test except that which he himself can perform, may make a differential diagnosis between threatened abortion, and inevitable or missed abortion, within a period of time varying between two and twenty-four hours.

REFERENCES

- (1) Rutherford, R. N. Surg., Gynec., and Obst., 1942, 74: 1139-1153.
- (2) Robbins, S. L., and Parker, F. Endocrin., 1948, 42: 237-243.
- (3) Wiltberger, P. B., and Miller, D. F. Science, 1948, 107-198.
- (4) Silbernagel, W. M. O.S.M.J., 1947, 43: 739-740.
- (5) Mazer, C., and Goldstein, L. Clin. Endocrin., 1932, 408.
- (6) Miller, D. F., and Wiltberger, P. B. Personal Communication.