

OBSTETRICS AND GYNECOLOGY

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Summary

Help during labor has existed since ancient times; we read in the Book of exodus that Midwives were attending laboring women some four thousand years before Christ. Nowadays we have Midwives, Doulas, obstetric Nurses, Nurses and Obstetricians at the bedside of women in labor. We keep women comfortable without depression of the

Baby.

In the prenatal period, ultrasound machines can diagnose a healthy fetus as early as 6 weeks gestation.

Prenatal care has evolved to be taking care of the woman as a whole and her unborn progeny. Regular visits to the Doctor can gauge the various parameters of a healthy pregnancy, give advice to the mother when she overeats or indulges in unhealthy foods or drinks.

Pre-existing medical conditions viz. Diabetes mellitus, serious infections and Hypertension are dealt with in conjunction with a colleague Internist. Multiple pregnancies are recognized early giving the parents enough time to be prepared for the extra gift or gifts. When the time comes for the delivery, the mother is acquainted with the surroundings since she had visited the Maternity ward on one or more occasions.

During labor she is kept comfortable by a continuous epidural analgesia instituted by the Anesthetist.

We always hope for a normal delivery but are prepared for Forceps, Ventouse or Caesarean delivery.

In Gynecology, routine yearly check-ups are recommended, Pap tests are done and if need be blood tests are ordered. Some women attend the office with a specific complaint viz. vaginal discharge, changes in the amount or frequency of the periods, vulval itching, abdominal pain etc... Each complaint should be investigated fully and if need be seek the help of Colleagues in Medicine or Surgery. I will never forget this woman who came to the office saying that she has had itching in the vulva for over a year and that the salves and medications given to her by her Family Physician “Don’t work!”! When I suggested that I examine her, she said: “Oh No! My Doctor never examines me, she gives me a new salve and off I go...” She finally agreed to the examination and the diagnosis was Vulval Carcinoma!

We see more Fibroid tumors, Ovarian cysts, irregular menstruations etc... rather than carcinomas.

The author thinks this is a fair assessment of what goes on in a Gynecologist’s office.

1. Definition of Obstetrics

Obstetrics is a Sub-Specialty of Medicine and Surgery that deals with the well-being of the Pregnant Mother and Fetus (developing Baby) during Pregnancy and aims at delivering a healthy Baby from a healthy Mother.

2. History of Obstetrics

Midwife is derived from the old Anglo-Saxon word “mit wif” (with wife). The first record of Midwifery was found in the hieroglyphics of ancient Egypt (3000 BC). In the

book of Exodus (1, 16), Pharaoh instructed the Midwives to kill the first-born Male of Hebrew women; however, the God fearing midwives disobeyed the king. In Medieval times, institutions were erected to take care of all medical matters; women in labor were also accepted. This proved to have fatal consequences since the birth attendant rushed to the expecting mother's bedside from the dissection room without washing his (her) hands, many mothers died of puerperal sepsis.

3. Infectious Diseases in the Pregnant Woman

A- Rubella

It is caused by the Rubella virus. It is also called German measles because it was discovered by a German Physician in the eighteenth century called Friedrich Hoffmann. Now all children are immunized against this disease at the early age of 36 months. Infected children exhibit a generalized rash, low grade fever, swollen glands and joint pains. However, if a pregnant woman is infected with Rubella in the first trimester (1st 3 months), she will have a miscarriage; if the infection occurs later than 20 weeks (2nd half of pregnancy), the newborn will suffer from cardiac, cerebral, ophthalmic and auditory ailments. Because of these complications, every child must be immunized; however, if the Obstetrician learns that a pregnant woman was not immunized, he cannot immunize her because the vaccine contains the live Rubella virus.

B- Cytomegalovirus

The pregnant woman, who acquires cytomegalovirus, has an increased risk of having a Baby with congenital central nervous system (Brain) anomalies. If the disease is disseminated, it will result in neonatal death.

C- Hepatitis B

Acute infections occurring in the third trimester will result in transmission of the Hepatitis virus to the infant causing either a fulminating disease causing death of the Baby or making him a chronic carrier.

D- Toxoplasmosis

Cats carry the parasite of Toxoplasmosis; if they transmit this parasite to a pregnant woman in the first trimester, it could result in miscarriages or severe fetal infection. If it is known to the Obstetrician that the woman has a cat, he could advise her to limit contact with the animal and stop emptying the litter box.

E- Human Immunodeficiency Virus (HIV)

This virus can be transmitted sexually, by infected needles or by infected blood products. Consider all women infected with HIV until proven otherwise, in the Delivery room all personnel are advised to wear a face mask and a water repellent gown. Do not use mouth suction and do not expose yourself to maternal or fetal secretions. Maternal-fetal transmission of the virus could be in the high 90^s%. Risks of perinatal transmission

are reduced when Caesarean section is performed and breast feeding is avoided. Treatment of mother and Baby in the post-natal period is recommended. Recent studies have suggested that anaphylaxis can follow HIV vaccination.

F- Psychiatric Disorders

Antenatal assessment must include an assessment of the risk of psychiatric morbidity. Patients who had any previous episode of psychiatric care are often very poor attendees at prenatal visits. Most psychotropic medications (except Lithium) are safe during pregnancy. Lithium, however, can be associated in about 5% of cases with Ebstein's (cardio-hepatic angle) anomaly. Benzodiazepines may be associated with some teratogenic risk.

Prenatal Tests

A- (Rh) tests: If the mother is Rh⁻ (Rhesus Negative), then the father's Rh must be obtained, if it is negative no further action is needed; however if the Baby's father is Rh⁺, the mother should be given anti D (or Rh Immune Globulin) 300 µg at 28 weeks to prevent the mother from being immunized to the Rhesus Factor (Rhesus iso-immunization).

B- Hemoglobin: If the maternal hemoglobin is low, iron and Vitamin tablets should be prescribed.

C- Urine testing: It should be done at each visit; urine should be tested for at least Albumen and Glucose. If albumen is found and the pregnant woman's feet are swollen, Toxemia of pregnancy should be suspected especially if the blood pressure is high as well. The pregnant woman should be advised to rest and substantially diminish her salt intake; if these measures fail to help, Diuretics should be given; however, if all these measures fail, admission to Hospital is recommended.

If Glucose is found in the urine, you must follow up by a blood test for Diabetes called "Glucose Tolerance Test" (GTT) which is a combined test of blood and urine testing for Glucose. GTT could differentiate between Gestational Diabetes and Diabetes mellitus. Gestational Diabetes is not of immediate danger but could result later in Diabetes mellitus, the mother should be advised to have nutritious meals but eat no more than the recommended amount of Carbohydrates in her diet.

However, if true Diabetes mellitus is found, the patient would be better treated by a Diabetic Specialist, it should be emphasized however that information on oral antidiabetic medications Biguanines (Metformin) and Sulfonyl ureas (Glyburide) has not been studied during pregnancy; therefore oral medications for Diabetes mellitus in Pregnancy is not recommended.

D- Blood Pressure is measured at each prenatal visit; if elevated it should be treated with Labetolol or any other suitable anti-hypertensive medication.

E- Body weight is taken and recorded at each visit; if there is an abnormal weight gain,

the patient should be advised that increased body weight in pregnancy can lead to unwanted complications viz. Toxemias. Many books have been written about excessive weight gain in pregnancy and she should be directed to one of many libraries where she can borrow the book for a nominal fee. If she needs help, some organizations specializing in giving free help to pregnant women are available for advice and lending pertinent books.

Non-Stress Test



Figure . Non-stress test

This test is done during pregnancy to assess the reaction of the baby to stress mostly uterine contractions. It is preferably done in Hospital and a tracing is obtained for study.

If there are significant decelerations with uterine contractions, admission to Hospital, rest and observation should be considered.

Tests done at each visit

1- Weight: It is charted at each visit and it is obvious at a glance whether the weight is going up or down.

2-Urine Testing for Glucose, Protein or infection. If glucose is up or down, a Glucose Tolerance Test (GTT) is ordered. If urinary albumen is increased, it could be a sign of Pregnancy Toxemia and the patient is advised about her diet, salt intake and we suggest to her a period of rest in the afternoon. If the test shows a possibility of urinary infection, a mid-stream urine sample is obtained in the laboratory for Culture and Sensitivity in case treatment is necessary.

3- Height of uterus and fetal heart rate (FHR) are obtained and charted.

4- Presenting Part whether it is Cephalic or Breech is assessed and documented.

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