

# Fetal Heart Rate Monitoring in Multiple Gestations

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LAS VEGAS — In multiple gestations, don't rely solely on the mother's perception of how the fetuses are positioned when monitoring fetal heart rates, Patricia M. Witcher, a registered nurse clinician, advised at a conference on fetal monitoring sponsored by Symposia Medicus.

She acknowledged that sometimes clinicians find themselves doing just that, "especially with women who have been admitted in an inpatient antepartum setting who are due to have quadruplets. She'll say, '[Baby] A is here, B is here, C is here,

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and D is here.' You can't rely on that."

An ideal way to identify each fetus before heart rate monitoring would be to use ultrasound, but "that's not realistic because most people who initiate monitoring don't do ultra-

sound," said Ms. Witcher, a nurse at Northside Hospital in Atlanta who specializes in labor and delivery and high-risk obstetrics.

The best way to identify each fetus is by doing simultaneous monitoring and looking for divergence of fetal heart rate tracings. "That's really the only way we have of ensuring that we have a heart rate for each fetus," she said.

She recommends drawing a quadrant on the fetal heart rate tracing that represents the four quadrants of the mother's pelvis. Mark the fetus lowest in the pelvis as "A" and assign subsequent letters to the rest. Using a number system is another option.

"Identification of each fetus is extremely important," she commented. "I can't tell you how many cases I see where it's not clearly labeled which fetus is which. You can figure it out if you see long-term monitoring, whether there have been in-

terruptions in that segment. You can figure out, 'This baby was in trouble before the mother got up to go to the bathroom, so this must be baby B again,' or whichever baby is having problems."

In a case of twins, some monitors will print the tracings of fetus A in a dark line and that of fetus B in a light line. Others use different colors of ink to help clinicians differentiate fetuses.

Ms. Witcher added that twins are synchronous in that they tend to exhibit ac-

celerations within 15 seconds of each other in about 51% of cases.

"Synchrony is not an indicator of discordancy," she said.

"It does not tell you whether you have discordant twins or not. If you don't have synchronous fetal heart rate patterns, it's not any indication that you have a problem with one versus the other. It's just the luck of the draw in timing if you display accelerations at the same time in those babies." ■

WHILE ALL FDA-APPROVED HORMONE PRODUCTS FOR MENOPAUSAL SYMPTOMS ARE CONSIDERED SAFE AND EFFECTIVE, WOMEN MAY PREFER AN ESTROGEN IDENTICAL TO THEIR OWN.<sup>1</sup>

**NOT ALL ESTROGENS ARE EXACTLY THE SAME.**

ACTIVEVILLA is indicated in women with an intact uterus for the treatment of moderate to severe vasomotor symptoms associated with menopause, the treatment of vulvar and vaginal atrophy, and the prevention of postmenopausal osteoporosis.

#### IMPORTANT SAFETY INFORMATION

Combined estrogens/progestins should not be used in women with known or suspected pregnancy, breast cancer, estrogen-dependent neoplasia, active deep venous thrombosis, thromboembolic disorders, myocardial infarction, or stroke, undiagnosed abnormal genital bleeding, or liver dysfunction or disease. ACTIVEVILLA should not be used by women with a known hypersensitivity to any of its components.

The use of unopposed estrogen therapy has been associated with an increased risk of endometrial hyperplasia, a possible precursor of endometrial adenocarcinoma. The addition of a progestin, in adequate doses and appropriate duration, to an estrogen replacement regimen reduces the incidence of endometrial hyperplasia, and the attendant risk of carcinoma in women with an intact uterus. Estrogen/progestin therapy has been associated with an increased risk of cardiovascular events such as myocardial infarction and stroke, as well as venous thrombosis and pulmonary embolism. Prolonged estrogen/progestin therapy in postmenopausal women has also been associated with an increased risk of breast cancer.

In clinical trials, the most commonly reported adverse events were breast pain, headache, postmenopausal bleeding, and nausea.

## Pregnancy Cited In Meningitis Risk

Meningococcal disease is almost 12 times more likely to occur in a child whose mother is pregnant, possibly due to hormonal alterations in the mucosal barriers of pregnant women that predispose them to carry the bacteria.

Elske van Gils and her colleagues at the University of Amsterdam examined family composition in 176 hospitalized children (mean age about 4 years); 88 were admitted with confirmed meningococcal disease and 88 for other reasons, mostly surgery.

Among the meningococcal cases, 17 (19%) of mothers were pregnant during the hospitalization, 6 were in their first or second trimester, and the rest were in their third trimester (Pediatrics 2005;115:590-3).

Among the controls, only 2 (2%) of mothers were pregnant. Pregnancy was associated with an increased odds ratio of 11.7, multivariate analysis showed.

Other studies have found that meningococcal infections in children are related to maternal carriage. The authors hypothesized that pregnant women may have increased or prolonged carriage rates.

—Michele G. Sullivan

