A New Patient Safety Initiative - NTQR

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Transcript

Alix Boyle: We’re here at the SMFM 2007. We’re talking to Dr. Larry Platt about a new patient safety initiative, can you tell us a little more about that?

Lawrence Platt, MD: Yes, I’d be glad to. This year the Society of Maternal-Fetal Medicine has worked very hard to develop this patient safety initiative, which we actually call the NTQR. It really reflects upon what we have been doing with the first trimester risk assessment, and the use of nuchal translucency.

Some years ago, probably about ten years ago, research in the United Kingdom showed that the use of a single, small measurement in the first trimester of pregnancy can actually help identify a risk in a patient, in a woman in the early parts of pregnancy, between 11 and 14 weeks of gestation that really goes beyond what we used to think is the way you do risk by age alone. It allows us to identify patients who are at risk for, for example, Trisomy 21 or Down Syndrome, congenital heart disease, and probably even more important it works most of the time in lowering her risk. So a woman who thought she was at high risk for these things has this test done in combination with two biochemical markers called free beta-hCG and PAPP-A allows them to reassign a risk rather than simply say, “You’re 35, you’re at high risk for Down’s syndrome, you need to have an amniocentesis or CVS”. So this test has shown to be very effective in identifying up to 90 percent of Down Syndrome fetuses and other abnormalities very early in the first trimester.

The problem with it, however, is that because this is a very small measurement, between 1.0 and 3.0 mm on most occasions, you need to have precise measurements taken. What was shown in the previous literature was very clear, that you need to be trained in this. You need to have ongoing quality monitoring in order for it to work. Simply going to a course, going on the weekend and going to do it, doesn’t allow you to take accurate measurements. In fact, we all know, “first do no harm”. What we found is that you could get false measurements, either falsely reassuring, or falsely raising the risk of the patient if you didn’t have ongoing quality monitoring. If you didn’t take the measurement in the right place each and every time, patients are given misinformation. Perhaps it’s easy to say that perhaps no information may even be better than false information.

So what has been shown in studies in the past? In fact in this country the NICHD sponsored two major trials, the BUN trial, which I was part of, and the FASTER trial, which now has published numerous articles, and clearly has shown its support.

For this program to work in the first trimester one needs to have an ongoing quality program. This is what the SMFM did in developing the Maternal-Fetal Medicine Foundation to develop this NTQR. The Nuchal Translucency Quality Review program has been a national consensus of leaders from our society, Society of Maternal-Fetal Medicine and the American Institute of Ultrasound in Medicine. The Society of Diagnostic Medical Sonographers were involved, members of the American College of OBGYN, and the American College of Osteopathic OBGYN - numerous people involved to support a society-based, nationally driven program of quality assurance, no different than what we would do with our board certification, recognized by the American Board of Ob/Gyn.

What we have learned over the course of time is that by developing this together we can improve the quality and enhance patient safety methodologies. Now, over the years we have learned an awful lot about how ultrasound can be helpful. Serendipitously we came across many things and found, as Dr. Nikolaides for example found the increase nuchal translucency can identify this factor, we have found that with improved resolution of ultrasound we’re seeing more things earlier in pregnancy to provide information to our patients at an earlier stage when decision making processes are available to them in a very private and comforting way.

For example, the system in front of us is a new product by General Electric, they call it the E8. It’s
sort of a family member of the Voluson Family. They have a very new transducer, a high frequency transducer that allows you to do 2, 3 and 4-D imaging that gives us spectacular images in terms of early observations of the fetus. We see fetal anatomy like you see on this screen that allows you to see things heretofore you couldn’t see until three, four, five weeks later in pregnancy, the fetal spine, the fetal head, spectacular images. In fact there are now studies looking at the fetal heart in the first trimester, when we’ve struggled in the second trimester. We are now seeing things in the first trimester that we couldn’t see before.

How does this all fit into what we are doing here at the society? We are using technology and the advances of technology to improve the quality of care of our patients. I wouldn’t be too surprised if in a few years it would be, I think, potentially the standard of practice to do a transvaginal scan on early pregnancy because we have learned that you can see more earlier by using these newly developed, high frequency transducers with improved resolution.

That’s our obligation, that’s our responsibility as members of the society, and members of the American population that we want to improve the quality of health care. It’s a combination of our partnerships with industry who improve the quality of the instrumentation. They give us better systems to see things earlier, make better diagnosis, improve the quality of our diagnosis with improved resolution, and it is our responsibility to educate and monitor the use of this technology so that it is used appropriately.

And that is what the NTQR is trying to do. It’s trying to monitor the use of these types of systems in the first trimester of pregnancy to provide the correct risk assessment to the patient to identify the fetuses at risk for an abnormality, or in fact identify that abnormality earlier. And, as I said earlier, even more importantly, in the majority of cases the baby is going to be normal. This lowers the anxieties that the families have as a result of what we provide them in the first trimester.

So first, do no harm, and that’s what these improved resolution systems allow us to do. That’s what we believe of the NTQR program, which is society based and driven by the Society of Maternal-Fetal Medicine and our partners, and these other societies to form this national consensus based program.

Alix Boyle: Thank you Dr. Platt.

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