# **CORRESPONDENCE**

# **Perinatal Problems in Multiple Births**

by Prof. Dr. med. Joachim W. Dudenhausen, Prof. Dr. med. Rolf F. Maier in volume 38/2010

## **Inconsistent Terminology**

We noticed some inconsistencies in the terminology used in the review article by Dudenhausen et al, which we wish to clarify. In twin pregnancies, a distinction is made—depending on placentation and zygosity—between dichorionic (two placentas) and monochorionic (one placenta) pregnancies and dizygous (non-identical/biovular) and monozygous (identical) twins.

We make a plea for using the terms zygosity and chorionicity correctly.

To monitor the pregnancy and antenatal care, determining zygosity is irrelevant and sonographically impossible (in dichorionic placentation); it is exclusively chorionicity that is important. A monochorionic twin pregnancy can develop only from monozygous twins, whereas a dichorionic pregnancy can, as Dudenhausen and Maier mentioned, develop from two different fertilized ova (dizygous) or a single ovum (monozygous) that has divided at a very early stage.

The statement "monozygous twins have a thin membrane, dizygous twins have a thick membrane" is therefore incorrect. Monochorionic twins have a thin membrane, and dichorionic twins (which may be monozygous or dizygous) have a thick membrane. Diagnostic evaluation by ultrasonography can determine the zygosity with any degree of certainty therefore only in monochorionic twins, not in dichorionic twins (exception: if the twins are not the same sex).

Further, we wish to point out that fetofetal transfusion syndrome (FFTS) with a stuck twin is not mild FFTS (*Figure 2*), but according to the criteria set out by Quintero et al. (1), it is severe FFTS.

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## **REFERENCES:**

- Quintero RA, Morales WJ, Allen MH, Bornick PW, Johnson PK, Kruger M: Staging of twin-twin transfusion syndrome. J Perinatol 1999: 19(8): 550–5.
- 2. Dudenhausen JW, Maier RF: Perinatal problems in multiple births. Dtsch Arztebl Int 2010; 107(38): 663–8.

PD Dr. med. Ursula Zollner Dr. med. Monika Rehn Prof. Dr. med. Johannes Dietl Universitäts-Frauenklinik Würzburg Josef-Schneider-Str. 4 97080 Würzburg, Germany E-Mail: zollner\_u@klinik.uni-wuerzburg.de

## **In Reply:**

We thank Zoller and colleagues for their interest in our article and agree that inconsistent terminology should be avoided and corrected.

Their comment that the terms chorionicity and zygosity need to be clearly differentiated is entirely correct. We support this request, even though in our article we used the terms occasionally in the common, imprecise, sense, not the desirable clarity.

The Quintero classification is useful and its use is recommended. However, in *Figure 2*, mild FFTS is mentioned without the finding of a stuck twin..

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#### **REFERENCES**

 Dudenhausen JW, Maier RF: Perinatal problems in multiple births. Dtsch Arztebl Int 2010; 107(38): 663–8.

Prof. Dr. med. Rolf Maier, Marburg Prof. Dr. med. Joachim W. Dudenhausen Kliniken für Geburtsmedizin Charité Campus Virchow-Klinikum Augustenburger Platz 1

13353 Berlin, Germany E-Mail: Joachim.Dudenhausen@charite.de

### **Conflict of interest statement**

The authors declare that no conflict of interest exists according to the guidelines of the International Committee of Medical Journal Editors.