Obstetric and Gynaecological Ultrasound in Mulgrave (formerly Diagnostic Women's Ultrasound), has provided specialist pregnancy and gynaecological ultrasound services to Melbourne's South East and the Dandenong region since 1989.

Dr Simon Meagher is an obstetrician/gynaecologist who has sub-specialised in ultrasound and prenatal diagnosis. He is the Director of Monash Ultrasound for Women, consultant staff specialist at the Mercy Hospital for Women and lecturer at both Melbourne and Monash Universities. He is well known for his clinical and procedural skills and academic achievements, having over 40 publications in local and international journals.

O & G Ultrasound provides a complete range of pregnancy and gynaecological ultrasounds and related procedures including prenatal genetic testing for Down Syndrome. Dr Meagher (obstetrician/ gynaecologist/ultrasonologist), Associates and sonographers specialised in obstetric ultrasound, work with state of the art, high resolution ultrasound machines. Together with an experienced team of nurses and support staff, our aim is to provide you with the highest quality ultrasound service available.

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OBSTETRIC & GYNAECOLOGICAL ULTRASOUND

# 2 Vessel Umbilical Cord

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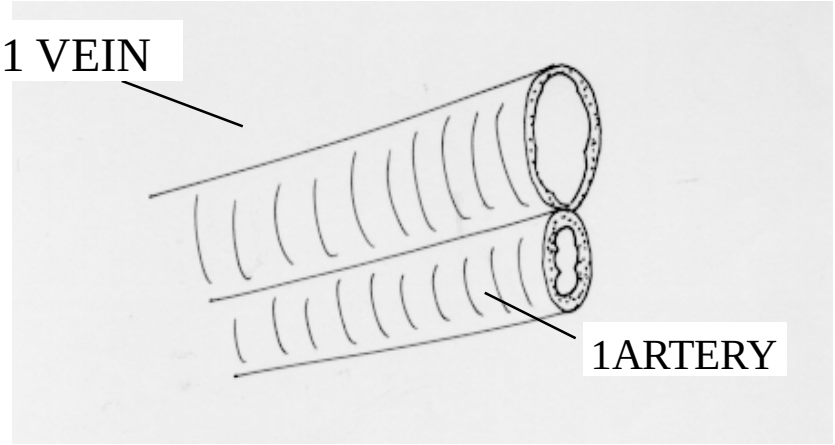
**How many vessels are there in the umbilical cord?**
The umbilical cord is the life-line to the baby. The cord contains the vessels that allow blood, nutrients and oxygen to flow back and forth between the baby and the mother. In 98% of pregnancies there are 3 blood vessels in the cord. One vessel takes blood to the baby and two vessels take blood away from the baby back to the mother. In 2% of pregnancies there are only 2 vessels in the cord; one in and one out.

**How is this detected?**
As part of the routine 18-20 week pregnancy ultrasound examination the number of blood vessels in the cord are counted. The cord splits into 3 vessels after entering the baby's abdomen; 2 pass downwards towards the baby's bladder and one up through the baby's liver. By looking with colour ultrasound, blood flowing through the vessels enables us to count them. This is a routine part of the 18-20 week examination.

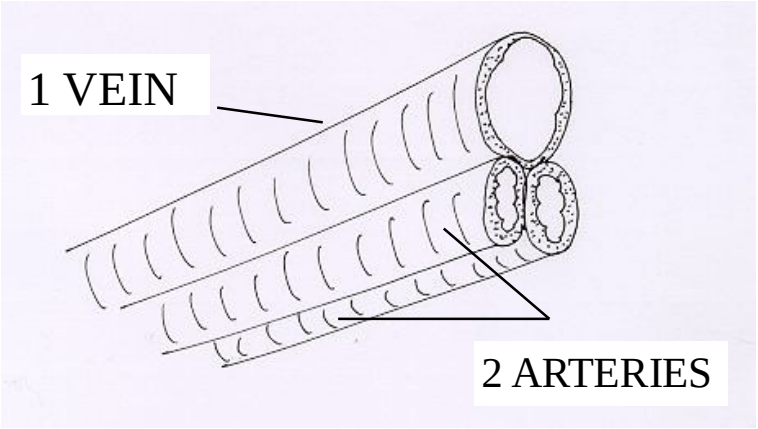
**What problems arise as a result of a missing vessel?**
As long as there is one vessel entering and leaving the baby there will be a normal supply of blood, oxygen and nutrients to the baby. A 2 vessel cord therefore in itself does not result directly in any problems to the baby. In fact in the vast majority of patients the pregnancy progresses uneventfully without any complications and the 2 vessel cord is simply regarded as a variation of normal. There is however an increased chance of delayed growth in later pregnancy and an increased chance of associated fetal heart abnormalities. For this reason a careful examination of the fetal heart will be performed at the 18-20 weeks scan. The majority of major cardiac abnormalities may be detected at this time.

**What precautions should I take?**
There are no special precautions. Your doctor will recommend a further close assessment of the fetal heart anatomy at 30 weeks of pregnancy. The heart at this stage is larger and therefore easier to examine. This examination provides an opportunity to assess the baby for subtle structural variations. It is expected that most major abnormalities will have been excluded at the 18-20 weeks scan.
Also at this scan the baby's growth and development will be charted at this time. In a small percentage of babies with a 2 vessel cord the babies growth is delayed. This is rarely a problem for the baby. At most your doctor may choose to bring labour on earlier than planned. Babies almost universally will pick up on growth following delivery.

**Diagrammatic Representation of a 2 vessel Cord**




**Diagrammatic Representation of a 3 vessel Cord**

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