PRÄNATAL
PRAXIS
STUTTGART

Fascination child.

Information for Parents-to-be

Dear Parents-to-be,

you have probably given some thought to what your baby will be called. Its name is an expression of its uniqueness. Every person is different, even before they are born. The phase of the baby's development before birth may follow a pattern, but nature is very inventive with individual variations. Our challenge is to recognise and assess these variations.

In most cases, we will have good news for the parents-to-be: there is the utmost probability that everything is alright. However every now and then, there are diagnostic findings that we need to discuss together. Calmly, and with the possibilities of present-day medicine in mind. Your decision to undergo extensive early prenatal diagnosis may then prove to have been a good idea, and the earlier you and I are informed, the better we can act for the benefit of your child. I will be the first doctor that gets to know your child a little better. I am aware of the great responsibility that I have on behalf of both you and your child. Please be assured that my team and I are well prepared for this. As a specialist doctor with further qualifications in obstetrics and perinatal medicine, I can offer extensive university hospital experience.

As a DEGUM-II course leader, I am always up-to-date with current academic research. State-of-the-art diagnostic equipment is available in my practice which not only delivers multifaceted results, but also allows you to glimpse the developing world of your child, which will fascinate you. Technology is not everything of course: A friendly team look forward to welcoming you into what we hope is a pleasant and comfortable practice environment.

We look forward to meeting you!

Yours,

Priv.-Doz. Dr. med. Ismail Tekesin
DEGUM-II Course Leader
Special Obstetrics and Gynaecology

What we give our attention to

During a typical 40 weeks of pregnancy, a whole person develops from two cells; an almost unbelievable urge to grow, which takes place in the mother's womb. As with all growth patterns which occur in nature, there are external and internal impulses which can lead to alterations in these patterns. There are three categories of alterations:

Genetic disorders

Genetic disorders arise from alterations in the genetic material, which are passed on in the family. These disorders can also develop as a result of a new mutation, even in a family where there were no affected members up to that point. Genetic disorders can affect metabolic function as well as the child's physical structure. Alterations in the genes which lead to a genetic disorder can usually be detected in the parents by specific diagnostic tests. Some disorders can be diagnosed before birth using molecular genetics. We work closely with experienced specialists in this area.

Chromosomal abnormalities

A small risk of this exists in every pregnancy, irrespective of family history and your own health. Chromosomes carry hereditary material. Small alterations in its makeup can affect the development of the unborn just as deviations from the number of chromosomes can. A person normally has 46 chromosomes in every cell, 23 from the mother and 23 from the father. Therefore every chromosome exists as a pair. As a result of random errors when the cell divides, there can be one chromosome too many (three instead of two). This is given the name „trisomy". Trisomy 21, known as Down's syndrome, is the most common abnormality. The risk of trisomy increases with your increasing age.

Developmental disorders

External influences such as medication, radiation effects or maternal infection can lead to malformation or illness in the unborn. The kidneys and urinary tract, heart and brain are most commonly affected.

There is a best time for every investigation.

The right moment for a first consultation is now.
We willingly explain our diagnostic procedures to you in detail in our practice.
Here are a few keywords:

Completed week of pregnancy

1) Chorionic villus sampling
From 11

2) First trimester screening
12 to 13

3) Amniotic fluid sampling
From 14+1

4) Triple Test
From 15+0

5) Alpha fetoprotein (AFP)
From 15+0

6) Umbilical cord blood sampling
From 18+0

7) Differentiated organ ultrasound / Echocardiography
19+0 to 20+6

8) Doppler sonography
From 26+0

9) 3D/4D Ultrasound
From 26+0

1) Chorionic villus sampling (Placentesis)
Because the placenta (known as the chorion in early pregnancy) originates from the same fertilised egg as the fetus, cells from the placenta can be removed for analysis of the baby's chromosomes. The test is useful when a chromosome analysis is necessary very early in the pregnancy, where there are noticeable problems with the embryo in the ultrasound image, for high-risk patients as part of first-trimester screening (see 2), for hereditary disorders or metabolic disease in the family or if you have an expressive request for an early diagnosis.

2) First trimester screening
Many early malformations can be excluded with this ultrasound examination (early malformation scan). By measuring the fetal nuchal translucency (a collection of fluid under the skin at the back of a baby's neck) we can estimate the risk of trisomy of chromosome 21 (Down's syndrome). The significance of this test is increased with an examination of the baby's nasal bone and the maternal blood (PAPP-A and free ß-HCG).

3) Amniotic fluid sampling (Amniocentesis)
This additional investigation is not part of routine pregnancy check-up tests and is accompanied by extensive counselling in our practice. Using this method, chromosomal abnormalities, neural tube closure defects („open back") and – under certain conditions – genetic disorders can be detected, for example. The amniotic fluid removed during the test completely reforms within 24 hours. To give you an initial indication whilst waiting for the final test results, we can also offer you a quick test (PCR or FISH).

4) Triple Test
The Triple Test is suitable for women who decide to have a risk assessment performed later in pregnancy. It offers risk estimation for trisomy of chromosome 21 and identifies neural tube defects. If you have already had first-trimester screening, we recommend an isolated maternal blood test for AFP (see 5).

5) Alpha fetoprotein (AFP)
Increased amounts of AFP in the mother's blood may indicate a neural tube defect (spina bifida) in the baby. The blood result can be affected by various factors, and an increased level does not necessarily indicate a malformation! The results are first verified with an amniotic fluid sample and /or the baby is examined with high resolution ultrasound for signs of malformation.

6) Umbilical cord blood sampling
About 2mls of the baby's blood are removed and tested. Umbilical cord blood sampling is only performed in certain situations, for example blood group incompatibility, infection during pregnancy, fetal anaemia, where there is suspicion of metabolic disease in the baby and there are noticeable problems seen on ultrasound in the later weeks of pregnancy.

7) Differential organ ultrasound / Echocardiography
This investigation is considerably more extensive than the ultrasound which is specified in maternity guidelines. It provides comprehensive images and, according to current knowledge, does not cause any harm to mother and child, even with repeated use. A multitude of fetal malformations and illnesses can be detected and also excluded with the help of ultrasound diagnostics. However it must be specifically pointed out that that even with modern equipment, the doctor's experience and great care taken, not all malformations and illnesses can be detected. A further component of this investigation is fetal echocardiography. Using this, we can assess the position, size and symmetry of the heart, the anatomy of the heart structure, heart valve function, heart rate and the position of the large vessels.

Normal nuchal translucency measurement in the 13th week of pregnancy

9) 3D/4D Ultrasound

More and more parents-to-be are interested in the fascinating images that this technique provides. The graphic, 3-dimensional portrayal of the face and other parts of the body are achieved by fast processing of special image reconstructions. Individual organs and "vascular trees" can be visualised from all sides. Many thin section planes (2D) are merged into a three dimensional image in the ultrasound machine's computer.

8) Doppler sonography

Doppler sonography offers a particularly detailed investigation of the uterine and fetal-placental blood stream (the blood flow between the womb and placenta and placenta and fetus). Using this method, the direction and speed of the blood flow can be measured with the help of ultrasound waves (haemodynamics).
We use this additional method in late pregnancy when there is suspicion of an acute or chronic deficiency in the unborn child.

3D capture of a baby's face in the 21st week of pregnancy

Fetal profile in the 21st week of pregnancy

First and foremost, it gives us the change to gain other complementary details, in addition to those provided by the other ultrasound methods.

3D capture in the 13th week of pregnancy

What to expect from each investigation

	Trisomy 21 Down`s Syndrome	Chromosomal abnormalities	Malformations	Cleft malformations (spina bifida)	Developmental disorders
1 Chorionic villus sampling	Exclusion	Investigation	-	-	-
2 Ersttrimester-Screening	Risk assessment	-	Exclusion or detection	-	Exclusion or detection
3 Amniotic fluid sampling	Exclusion	Investigation	-	Investigation	-
4 Triple-Test	Risk assessment	-	-	Risk estimation	
5 Alpha fetoprotein (AFP) from mothers blood	-	-	-	Risk estimation	-
6 Umbilical cord blood sampling	Exclusion	Investigation	-	-	-
7 Differential organ ultrasound / Echocardiography	-	-	Exclusion or detection	-	Exclusion or detection
8 Doppler sonography	-	-	-	-	Detection

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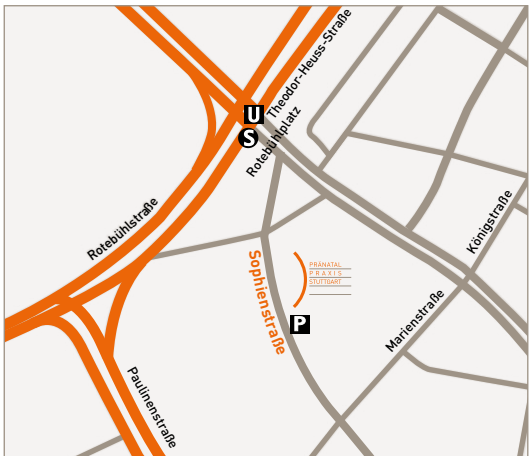
Our practice is ideally situated in Stuttgart city centre, very near to Rotebühlplatz.

Parking:
Public underground car parking spaces are available below the practice.

Appointments are by arrangement only

S-Bahn:
Alight at the "Stadtmitte" stop, exit via "Rotebühlplatz"

U-Bahn:
Alight at the "Rotebühlplatz" stop, exit via "Rotebühlplatz"



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