# **Birth path**

The birth path is the organization of the health network of integration between territorial and hospital services in the management of pregnancy. The intent is to offer all women and couples a specific accompaniment to pregnancy, which guarantees uniformity, continuity, support and listening, from pre-conceptional counseling to the first months of the child's life. It is a networked work, the result of continuous collaboration between professionals in the different territorial and hospital offices, who share objectives and paths, also through moments of common professional updating.

The common goal is to ensure appropriate perinatal care, which balances the needs and safety standards for mothers and children, with the recognition of the naturalness of birth and the need for humanization of the path.

### pregnancy



Pregnancy is the biological condition of the woman from conception to the time of childbirth.

The duration of pregnancy is calculated in weeks, starting from the date of the last menstruation: for this reason it is important to know for sure this date. Pregnancy is defined as:

- at term that whose delivery takes place between 37 and 41 weeks
- preterm (or premature birth) that in which the birth takes place before 37 weeks
- prolonged (beyond term) when childbirth occurs at 42 weeks or more.

#### performance:

- Surgery of physiological pregnancy
- Health balance (taking care of the expectant mother at 38 weeks)
- Obstetric ultrasounds
- Screening of chromosomal diseases in the 1st trimester of pregnancy
- Invasive prenatal diagnosis
- Birth accompaniment course
- Vaccines in pregnancy
- Cord blood donation
- Upheaval of the fetus in breech presentation
- Pathology surgery of pregnancy
- Level II obstetric ultrasound surgery
- Fetal echocardiographies
- Term pregnancy surgery
- Routine anti-D immunoprophylaxis in Rh NEGATIVE women

# Surgery of physiological pregnancy

Dedicated to monitoring physiological pregnancy. On the occasion of the first visit, the woman is taken care of by a team consisting of Midwives and Doctors, who will guarantee her personalized assistance throughout the pregnancy, respecting the physiology. Monthly meetings are planned that include the interview with the Midwife, the discussion of doubts and inert issues related to pregnancy. The midwife also assesses the state of maternal and fetal health, checks the examinations carried out and plans subsequent checks. In parallel with the activity carried out by the Midwife, the doctor guarantees the execution of ultrasounds and the management of risky situations.

**Documents required:** challenging

"FIRST MIDWWIFE VISIT 89263"," CHECK-UP MIDWIFE VISIT 89264"

Booking: between the 7th and 10th week.

#### Reference centres

Varese Bridge Hospital Hospital of Tradate Hospital of Cittiglio Hospital of Angera Territorial Consultors

# **Obstetric ultrasounds**



The ultrasound examinations currently recommended during a physiological pregnancy are three (Ministry of Health D.M. of 20/09/1998):

- I trimester: between 11 and 13 + 6 gestational weeks. On this occasion, the measurement of nuchal translucency is also carried out and it is possible to take a maternal blood sample for the combined test, if it has not already been performed previously (see Aneuploidy information and see section "Screening tests for major aneuploidies")
- II trimester: between 20 and 22 gestational weeks
- III trimester: between 30 and 32 gestational weeks.

A second-level ultrasound clinic dedicated to couples is also established in which an increased risk of congenital fetal pathology has been identified, through screening investigations or on the basis of an already existing history.

Forms and information

### Reference centres

- Varese Bridge Hospital
- Hospital of Tradate
- Hospital of Cittiglio
- Hospital of Angera

# Screening chromosomal diseases 1st trimester of pregnancy

It is possible to carry out at our facility the combined test, which aims to estimate the individual probability that the fetus is affected by one of the most frequent chromosomal abnormalities (trisomy 21 or trisomy 18). It is a screening test that is based on the use of a combined technique that combines the ultrasound examination of nuchal translucency with a biochemical analysis of maternal blood.

The ultrasound with the measurement of nuchal translucency can be carried out free of ticket with the National Health System, while the costs of the blood test are currently borne by the patient.

Biochemical analysis (BITEST) sampling can be performed:

- between the 9th and 11th gestational week, the result of the combined test will be available after 48 hours after the ultrasound is performed
- at the same time as the obstetric ultrasound of the first trimester with response times of about 7-10 days.

Fasting is not necessary. On the occasion of the withdrawal it is necessary to deliver the appropriate information and consent form duly completed and signed.

information and consent sheet

# Reference centres

<u>Varese Bridge Hospital</u> <u>Hospital of Angera</u>

# Invasive prenatal diagnosis

We mean villocentesis, amniocentesis and funiculocentesis procedures, aimed at identifying fetal chromosomal pathologies or at searching for specific infectious agents, or at evaluating fetal hematological parameters. Except in urgent situations, the procedures are scheduled in a single weekly session without numerical limits of appointments, on Wednesday mornings.

The patient accesses invasive prenatal diagnosis:

- setting the appointment directly in our clinics if the couple has already discussed with their caregivers the indication to the examination and this falls within the current ministerial indications (eg high risk after screening tests, maternal age over 35 years, ...). In any case, a consultation will be carried out on the day of the appointment before performing the procedure
- after carrying out <u>genetic counseling</u> to establish the indication to the procedure where the ministerial indications for invasive prenatal diagnosis are not present or in case of specific pathologies of the couple or family members
- direct access from our level II ultrasound clinics when indicated.

#### forms

INFORMATIVE PRENATAL DIAGNOSIS OF CHROMOSOMAL PATHOLOGIES: VILLOCENTESIS AND AMNIOCENTESIS

INFORMATION AND CONSENT TO VILLOCENTESIS

INFORMATION AND CONSENT TO AMNIOCENTESIS

INFORMED CONSENT TO THE PERFORMANCE OF PRENATAL GENETIC TESTS

<u>INFORMED CONSENT TO THE EXECUTION OF TESTS BY CHROMOSOMAL MICROARRAYS (CMA) ON</u> FETAL DNA SAMPLE

#### Informative videos prepared by the gynecology obstetrics team

- pregnancy
- Pregnancy: when to go to the Hospital
- Labor and Childbirth
- Management of pain in labor
- nursing
- puerperium
- Homecoming with newborn
- Child safety in the car
- Born to read
- Feeding in pregnancy
- Dental hygiene in pregnancy
- Safety measures in pregnancy
- Physical activity in pregnancy
- Baby bath

# **Vaccines in pregnancy**

The vaccines recommended in pregnancy and provided for in the National Vaccination Prevention Plan (PNPV) 2017-2019 include:

- diphtheria, tetanus and whooped cough (dTpa)
- flu during the epidemic season.

Vaccination in pregnancy is able to provide protection against some infections, expressing its action not only on the woman but also on the fetus and the newborn, through the transfer of maternal antibodies transplacentally or through lactation.

On the day of administration, it is necessary to present yourself with a binding issued by the Doctor or Specialist

- for intramuscular injection of pertuspse vaccine [Performance code: 99.2A INJECTION OR INFUSION OF SPECIFIC DRUGS] + obstetric examination (control) with exemption P03 – "Services related to mandatory or recommended vaccination practice". Vaccination is free of charge.

#### **forms**

# Forms Vaccinations in pregnancy



MODULE PREVACCINAL ANAMNESIS IN OBSTETRIC FIELD
CONSENT ACQUISITION FORM FOR DIPHTHERIA-TETANUS-PERTUSS (DTPa) VACCINATION IN
PREGNANCY

INFORMATION VACCINATION ANTIPERTUS COUGH IN PREGNANCY

# **Umbilical cord blood donation**



Umbilical cord blood contains a significant share of hematopoietic stem cells, a resource for the treatment of diseases of the blood and immune system. Since 2003, a deed of collaboration has been signed between our birth point and the Milan Cord Blood Bank, of the Policlinico di Milano: at our facility it is therefore possible to collect umbilical cord blood immediately after birth and send it to this bank for storage and possible use for therapeutic purposes. It is a solidarity donation, that is, to make the umbilical cord blood of your child available to anyone who needs it and is compatible. The donation is voluntary, anonymous, free of charge and does not involve any risk to the mother and the newborn. The availability of the woman is required, if the collection is suitable, to return to the hospital for a control sampling six months after giving birth.

Those interested can contact a qualified midwife, who explains to the couple what the donation consists of and submits a questionnaire to assess its suitability.

### reference centres

<u>Varese Bridge Hospital</u> Hospital of Tradate

# Upheaval of the fetus in breech presentation

All patients with a podalic presentation fetus after the 36th week of pregnancy can undergo, after ultrasound and clinical evaluation, the upheaval maneuver. It is a maneuver by which a child in breech presentation can be "upside down" upside down, in such a way as to be able to be born through the natural ways: in practice we try to lift the seat from the pelvis with a hand of the operator resting on the maternal abdomen and then we help the fetus to perform that "tumble" forward that it should have done spontaneously pushing behind the nape. Obviously it is a harmless maneuver for the fetus that is still monitored in real time in its movement with ultrasound and always monitoring the heart rate. The upheaval is performed in one of the labor-delivery rooms and involves hospitalization in the morning and discharge in the afternoon. The success rate of this maneuver in our O.U. is around 50-60%, in line with the data of the literature and other centers where it is performed.

#### Reference centres

Varese Del Ponte Hospital

# **Abortion surgery**

The management of pregnancies at risk for maternal and/or fetal pathology is entrusted to a small group of experts in maternal-fetal medicine, who have specific training and experience in this field. Over the years, a network of non-obstetric reference specialists has been created around this clinic, who in turn have acquired peculiar skills for the management of pregnant women (Diabetologist, Internist, Cardiologist, Endocrinologist, Nephrologist, Psychologist, Psychiatrist)In this way, thanks also to the high volumes of activity due to the centralization of certain complications, it has been possible to create specific clinics:

- monitoring of multiple pregnancies (an average of 100 twin pregnancies are followed/year)
- diabetes and pregnancy clinic (in collaboration with SS Diabetology of the Circolo Hospital)
- hypertension surgery in pregnancy (in collaboration with the Center of Arterial Hypertension of the Circolo Hospital and the Cardiology of the Del Ponte Hospital)
- outpatient clinic for the advice and management of infectious diseases in pregnancy
- HIV clinic in pregnancy (in collaboration with S.C. Infectious diseases of the Circolo Hospital)
- outpatient thrombophilic conditions in pregnancy (in collaboration with the Thrombosis and Hemostasis Center of the Circolo Hospital)
- outpatient clinic for precesarized patients who wish to be admitted to the labor test
- obesity and pregnancy clinic (in collaboration with the dietitian and psychologist)
- other specific clinics for the management of at-risk pregnancies

### Reference centres

Varese Bridge Hospital

# Level II obstetric ultrasound surgery

The second level ultrasound surgery is dedicated to couples in whom an increased risk of congenital fetal pathology has been identified, through screening investigations or on the basis of an already existing history.

#### Reference centres

Varese Bridge Hospital

# **Fetal echocardiographies**

Fetal echocardiography is a diagnostic examination that has as its purpose the sequential control of cardiac anatomy in order to highlight or exclude the presence of congenital heart disease in fetuses at risk. A fetus is considered at specific risk of congenital heart disease in the presence of one or more of the following factors:

- familiarity for congenital heart disease
- maternal diseases, such as diabetes or some autoimmune diseases
- · maternal infections, mostly viral
- fetal chromosomal diseases
- suspicion of congenital heart disease at screening test
- fetal arrhythmia
- increased nuchal translucency
- early fetal underdevelopment
- · extra-cardiac malformations
- non-immunological fetal hydrops
- · monochorial twinning.

The examination is performed at 20-22 weeks of gestation. In cases where there is an early indication, maternal or fetal, echocardiography can be carried out even before this time. In case of later suspicion, the examination can be performed even after 22 weeks.

Forms: information

# Reference centres

Varese Bridge Hospital

# Term pregnancy surgery

It is accessed by all pregnant women who have reached or exceeded the presumed date of delivery (from 40 weeks of gestational age).

The pregnant is subjected to fetal heart rate recording for about 30-40 minutes, blood pressure measurement, obstetric examination, ultrasound control of the amount of amniotic fluid. In low-risk pregnancies, the first check-up is scheduled at 40+3 to 40+6 gestational weeks. Subsequent appointments are expiring in 3-5 days. Reached the 41 + 5 week of gestation, hospitalization is scheduled for induction of labor.



The first access can be booked according to the indications provided by the different birth points, shown on the side.

It is necessary to present yourself at the first appointment with:

- health card,
- demanding for "OBSTETRIC VISIT 89.01, OBSTETRIC ULTRASOUND AND CARDIOTOCOGRAPHY" (exemption M41)
- bring with you all the obstetric documentation.
- Reference centres
- Varese Bridge Hospital
- Tradate Hospital
- Cittiglio Hospital

# Routine anti-D immunoprophylaxis in Rh NEGATIVE women

The physiological pregnancy guidelines of the Istituto Superiore di Sanità recommend the performance of routine anti-Rh (D) immunoprophylaxis to all Rh negative women at 28 weeks of pregnancy.

Women who have a Rh negative group, in pregnancy can develop an immune response (ie produce antibodies, called anti-D) against the red blood cells of the fetus. This can only happen if the child's father is Rh positive and the fetus is Rh positive. Maternal antibodies attack and destroy the red blood cells of the fetus: the possible consequence is anemia, known as hemolytic disease of the fetus, which in severe cases can lead to endouterine death.

Anti-D immunoprophylaxis consists in the administration, by intramuscular injection, of human anti-D immunoglobulins to Rh negative women, in order to prevent the formation of maternal antibodies against the red blood cells of the fetus. It is recommended in the third trimester of pregnancy because at this time small "occult" transplacental hemorrhages can more easily occur, which put maternal and fetal blood in contact, in the absence of clinical manifestations.

On the day on which the immunoprophylaxis is scheduled to be performed, you must have with you:

- outcome of the indirect Coombs test performed in the laboratory after the 25th gestational week, to detect the presence of anti-D antibodies in maternal blood. In case of positive testing, prophylaxis is not carried out.
- Demanding for "injection of specific drugs" (code 992A), with exemption M50
- Outcome in original of one's own blood type
- Informed consent form signed by the attending gynecologist and the patient

For the performance of anti-D immunoprophylaxis, fasting is not required

<u>forms</u>