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THE PATH LEADING TO CHILDBIRTH

PREGNANCY

By looking after her own health, a mother-to-be helps to make sure her pregnancy will progress normally and in addition safeguards the health of her baby.

Medical checks in pregnancy

Periodical, regular medical **check-ups** during pregnancy are essential¹. Laboratory tests are prescribed by the doctor on a case by case basis, according to individual requirements. Three scans are normally required during the course of a pregnancy: one in the first trimester, by the 12th week, one from the 20th to the 22nd week and the third one from about the 30th to the 32nd week².

The first scan is important as it confirms the date of the pregnancy and establishes the presumed delivery date. The other scans do not serve to date the pregnancy but to check that the foetus is developing properly. The second scan is known as the "morphological" scan as it evaluates how the organs of the foetus are developing. The third mainly checks the correct foetal growth.

In pregnancies which progress normally, further scans are usually not necessary.

Monitoring the foetal heart beat (the so called "tracing", or more specifically **cardiotocograph**), in normal pregnancies, is prescribed only after the presumed delivery



date onwards, so that the conditions of the foetus can be monitored

¹ All check-ups must be booked to the Family Counselling Services (Consultori Familiari), to the outpatient district clinics or the Santorso Alto Vicentino Hospital. You should only go to the Accident and Emergency Unit (Pronto Soccorso) if there is an actual emergency.

As soon as a woman finds out about her pregnancy, she should immediately book an appointment to see a gynaecologist (a doctor's prescription is not required, just an appointment) and see her family doctor (GP) who will provide information and advice to prescribe tests, folic acid and the documents required for the first scan.

During the first appointment with the gynaecologist, it is necessary to take results of tests, the last Pap test and any documents concerning the findings of any medical conditions diagnosed prior to the pregnancy or during previous pregnancies.

² Scans must be scheduled and booked in advance, in order to be carried out at suitable times.

during labour ³. All mothers-to-be are advised to attend the **Prenatal Courses** ⁴ which provide useful information and help to make sure that pregnancy, labour and delivery become a serene and conscious experience.

Some classes, to which fathers-to-be are also invited, are theory based, whilst others, reserved just for the mothers-to-be, are practical and are held in a gymnasium.

Prenatal Diagnosis

Almost all babies are born healthy; only one in a hundred born with serious physical or mental disabilities.

One of the most common causes of disability is Down's Syndrome, which develops when the foetus receives a triplet of chromosomes 21 from the parents instead of the usual pair (Trisomy 21).

This disorder becomes more frequent as the mother's age increases; however it might occur, though rarely, amongst young women.

The mother-to-be who wishes to know if her foetus presents this condition, or other serious chromosomopathies, may resort to the prenatal diagnosis. An absolutely certain diagnosis can only be obtained using so-called "invasive" procedures: **Villocentesis Sampling** and Amniocentesis. In Villocentesis Sampling, carried out between the eleventh and fourteenth week of pregnancy, a small amount of tissue is collected from the placenta (chorionic villi).

Amniocentesis on the other hand consists of collecting a sample of the liquid surrounding the foetus and is carried out after the fifteenth week. The main issue of these tests is that in one per cent of cases they can cause miscarriage, even if the baby is healthy.

There are also other tests which do not expose the mother or baby to any danger which calculate the risk of a baby being affected.

The most accurate method of risk assessment is based on statistical calculations which take into account the mother's age, the level of some of

³ Tracings must be booked a few days in advance by calling, during weekdays, between 10 am and 6 pm, No. 0445-571776 (Santorso Hospital Cardiotocography Service - CTG).

⁴ For our ASL these are organised by the Family Counselling Services (Schio, Thiene, Piovene), where you can obtain information and bookings. We advise you to book early, during the first few months of pregnancy.

the pregnancy hormones measured by means of a simple blood test and the results of a scan carried out between the eleventh and thirteenth week (measurement of the “**Plica** or **Nuchal Translucency**”, in other words the thickness of the tissues in the rear part of the neck).

The combination of these data (**Combined Test**) identifies 90% of Down’s syndrome babies.

If you are interested in finding out more about it and in carrying out these tests, please consult our internet website and discuss about it with your gynaecologist during your first pregnancy check-up.

Tips on hygiene during pregnancy

Diet

For nine months the future mother’s body will be building, protecting and nourishing her child. Eating properly during pregnancy is one of the most important things she can do for herself and for her baby.

The diet of the future mother should be balanced, healthy and varied, bearing in mind the importance of quality over quantity in order to avoid putting on too much weight.

The growth of the foetus requires a balanced dose of all nutrients: proteins, carbohydrates, fats, vitamins, minerals and water. Energy requirements are not the same for all individuals, but vary according to age, activity level and physical conditions. However it is known to not to eat for two!

It is essential to consider how foods are handled so that it can be made a full use of all their nutrients. Meals should be as simple as possible. All vegetables that do not require to be cooked should be eaten raw, but only after being carefully washed. Meats, preferably white and lean, and fish, are more easily digestible if grilled or oven baked and then drizzled with cold oil.



It is also advisable to use honey instead of sugar because, as well as being an excellent sweetener, it has a toning and beneficial effect on the digestive tract. It is crucial to drink plenty, preferably water. The consumption of sugary drinks, especially fizzy ones, should be limited in all cases. Salt and spices should be used with moderation.

Weight gain

It is essential that weight gain is controlled. A weight gain of 8-12 Kg over the whole pregnancy is considered normal. Weight is gained most of all in the third quarter.

An excessive increase in weight may cause disorders, even serious ones during pregnancy and make labour and delivery more difficult. Moreover, it is extremely difficult to lose weight after the birth.

Smoking and alcohol

It is now confirmed that smoking has negative effects on the body. Nicotine causes the blood vessels in the uterus and placenta to narrow. Development of the baby is often retarded for smoker mothers. Nevertheless nicotine passes into the mother's milk and can cause disorders in the new-born.



Passive smoking is just as dangerous.

We hope that pregnancy will provide the opportunity not only for the mother-to-be but also for her family members to give up smoking.

The intake of alcohol or spirits must be avoided as these can cause damage to the liver and brain cells of both mother and child.

Medicines

Medicines are not to be taken unless prescribed by a doctor. Indeed the doctor himself has to be cautious on prescribing medicines at any time during pregnancy and in particular during the first three months when the baby's organs develop.

Most pregnant women do not require vitamins or minerals supplements as they receive these through eating a correct diet. Generally are prescribed only **iron** to prevent anaemia and folic acid for all the new mums.



A higher intake of **folic acid** during the pre-conceptual period (at least one month before conception and during the first three months of pregnancy) than the amount consumed in a normal diet definitely reduces the risk of abnormalities of the nervous system in the foetus and can also reduce the incidence of other congenital malformations (for example heart diseases and defects of the urinary tract).

Sexuality

A satisfying sex life increases the psychophysical wellbeing of the mother-to-be.

If the pregnancy progresses normally, there are no reasons, from a medical point of view, why the expectant couple should not continue sexual relations.

Genital intercourse however is not recommended if there is a threat of miscarriage

or pre-term delivery. Physical and mental changes in the pregnant woman could lead to an increase or reduction of her sexual desire.

Physical exercise

Sports that cause a considerable amount of fatigue are not recommended. Walks, short cycle rides in places where there is not a great deal of traffic, swimming and gentle exercising are a good option.

Personal hygiene

It is a good rule to bathe or shower frequently, avoiding using water which is too hot or too cold. Hair can be washed as often as wished, but dyes must be avoided because of the possible toxic effect they could have on the baby and the risk of triggering an allergy on contact with the scalp.

Proper oral hygiene which includes brushing the teeth after every meal is essential. There are no reasons why dental treatment cannot be car-



ried out during pregnancy.

Clothing must be simple and not too tight. Choose underwear made of natural fabrics which allow the skin to breathe. Shoes must be comfortable and high heels must be avoided.

Travelling

During normal pregnancy there are no particular reasons why the future mother should not travel. Obviously trips must be organised in such a way as to make travelling as comfortable as possible and itineraries chosen that are near to medical facilities which can be consulted if problems arise. Flying is the preferable mean of transport for long distances.

Working

The future mother may continue to work during pregnancy as long as this does not lead to excessive physical strain or possible exposure to traumas, or contact with potentially toxic substances.

For additional information the company website could be useful: http://www.ulss4.veneto.it/web/ulss4/Ospedale/gineco/cosa_facciamo/14_certificato_astensione_anticipata

Prevention of toxoplasmosis

Toxoplasmosis is a fairly common disease, which in healthy adults may pass unobserved or present symptoms similar to influenza. If the infection is contracted for the first time during pregnancy, it can be transmitted to the foetus, especially during the last three months. Infection exposes the foetus to the risk of miscarriage during the first trimester of pregnancy and damage to the nervous system at the end of pregnancy. The disease is spread primarily by ingesting directly a parasite or some of its cysts.

It can be prevented by avoiding eating raw or undercooked meats (also avoid eating salamis and cured meats, including ham, as it is not cooked at a high enough temperature).

Fruit and vegetables should be carefully washed and you should wash your hands thoroughly after handling any vegetables or raw meat. Always wear gloves when doing any gardening work as the soil could be contaminated with the faeces of cats or any other animals.

If you own a cat, always wash your hands thoroughly after touching it and wear rubber gloves when cleaning the cat litter. When you deci-

de to try for a baby, or as soon as you discover you are pregnant, it is always a good idea to test for the presence of antibodies against the parasite (toxotest). If the test result is negative, it should be repeated with regular intervals during the pregnancy so that any infection can be identified early. If the test results as positive, contact your doctor as soon as possible. A positive result may simply mean you have come into contact with the parasite in the past and are now immune, or that you are currently infected. If this is the case, you must be given suitable medication in order to prevent it spreading to the foetus.

Cytomegalovirus and pregnancy

Cytomegalovirus (CMV) is a virus that causes an illness which is normally not serious. In the majority of cases the infection is asymptomatic, i.e. those contracting it display no symptoms. In approx. ten percent of the cases it manifests itself as a condition similar to influenza. Those who have already contracted it are not immune and therefore they could become infected again. This infection can become potentially dangerous if contracted during pregnancy, since the virus can enter the placenta and infect the foetus.

The infection can be contracted by coming into close contact with infected individuals, through saliva, blood, urine or sexual intercourses. Generally the individuals at higher exposure risk are those working with very young infants, in nursery schools and crèches, since they could come into contact with the saliva and urine of babies during nappy changes.

The risk of infection can be reduced by frequently washing hands with soap and water, avoiding kissing babies near or on the mouth and avoiding sharing food, beverages, cutlery and toothbrushes with them. If the infection is contracted during pregnancy, the virus does not always pass into the foetus. In case of first infection, the risk of transmitting it to the foetus is 3-4 cases in every 10 pregnancies; in case of re-infection instead, the risk is much lower: approx. 2 cases every 100 pregnancies (in Italy, about 8 out of 10 women have already had a first infection before pregnancy).

Even when the virus pass into the foetus, in the majority of cases (85%) the newly born suffers no consequences; in the remaining cases retarded growth can occur, as well as hearing problems. Cases of serious neurologic problems are very atypical.

The serologic test (blood test to identify antibodies) to assess whether

the woman has already had a previous CMV infection, or whether she was infected during pregnancy, is not a routine test and is not included among those offered free of charge, since it only assess whether the mother has contracted the infection, but not whether the virus was transmitted to the foetus.

The only test able to prove whether the virus has penetrated the placenta is Amniocentesis which, as already discussed, is an invasive examination implying a certain percentage of risk.

In any case should the virus have affected the foetus, there is no examination that can assess the consequences the infection could have on the baby and the extent of their seriousness.

And finally, there is no known effective therapy to prevent damage to the foetus. For these reasons the serologic test to search for the antibodies against CMV in expectant mothers is not considered useful, in fact it implies the risk of inducing anxiety in the future parents, without any real benefit.

Blood group incompatibility (mother-foetus isoimmunisation)

The term encompasses all consequences arising from incompatibility between the mother's and the foetus' blood groups.

A significant part of this concern is due to incompatibility of the Rh factor. In general, 85% of white individuals is Rh positive (in other words it has the Rh factor, represented by antigen D, on the surface of the red cells), the remaining 15% is Rh negative (since this antigen is missing). Incompatibility between mother and foetus is verified only when the mother is Rh negative and the baby Rh positive. Since a baby can be Rh positive only if at least one of the two parents is, it follows that only those pregnancies in which the mother is negative and the father Rh positive, are at risk.

In this case, for a genetic reason, the baby has 70% probability of being Rh positive, like the father. In an Rh positive foetus problems can arise if its blood comes into contact with the mother's blood.

In this case the mother could generate antibodies that then destroy the red cells in the foetus itself, causing various degrees of anaemia and jaundice. Every new contact of the blood of a foetus incompatible with that of the mother raises an increasingly severe response in the mother's antibodies, resulting in greater risks in pregnancies subsequent to the first, since the possibility of contact between foetal and maternal blood is greatest during delivery.

The anti-D prophylaxis (intramuscular injection of anti-D human-gamma globulins) can prevent this isoimmunisation disease.

This injection is recommended to all Rh negative pregnant women whenever any risk of contact between foetal blood and maternal blood occurs: abortions, extra-uterine pregnancy, invasive prenatal diagnosis, placental bleeding during the 28th week. For further information it is useful to follow the link <http://www.ulss4.veneto.it/web/ulss4/Ospedale/gineco>

Within 72 hours of delivery, the prophylaxis is offered to all Rh negative mothers that gave birth to an Rh positive infant.

During the pregnancy of Rh negative expectant mothers the Indirect Coombs Test (T.C.I.) will be periodically prescribed in order to assess the possible presence of anti-D antibodies in the mother's blood, and at the twenty-eighth week, a dose of anti-D immune-prophylaxis will be prescribed.

Possible disturbances during normal pregnancy

Nausea and vomit

Typical disturbances of the first trimester. It is advisable to eat smaller more regular meals made up of simple foods which are moderately salted and mainly dry. In addition it is recommended avoiding exposure to very strong or unpleasant smells and avoiding places where the air is stale or there are smokers. Excessive production of saliva and difficulty in swallowing it (sialorrhoea and ptialism) are annoying disturbances which will disappear by themselves and for which no really effective therapy exists.

Feeling tired and drowsy

These are absolutely normal, especially at the beginning of pregnancy.

Constipation

This is a particularly frequent disorder during pregnancy. It can be prevented and corrected by following a diet containing plenty of fruit and vegetables and drinking plenty of water (at least one litre a day) and getting some exercise. If constipation persists despite these rules, ask the doctor about the use of rectal evacuators (suppositories, mini-enemas). Only use laxatives if prescribed by the doctor.

Vaginal discharge

There is an increase in normal vaginal discharge throughout pregnancy (leucorrhoea), especially towards the end to clean out the vagina ready for the baby's descent. Only if this is accompanied by burning sensations, itching or foul smell, a gynaecologist should be consulted.

Swelling

It is normal during the last months of pregnancy to have swollen ankles by the end of the day. If they show signs of swelling in the morning or swelling is extended to the hands and face, your gynaecologist must be informed immediately as this could be a symptom of a serious complication of pregnancy.



Muscular cramps

Frequent during the last few weeks of pregnancy, generally at night, in the back of thighs and calves. Cramps might be caused by several factors: tiredness, changes in circulation or mineral deficiency caused by excessive sweating.

It may be useful to massage and warm up the areas which are painful and increase the intake of foods high in potassium and magnesium (bananas, pulses, potatoes).

Varicose veins

During pregnancy, blood vessel walls are more relaxed and tend to lose tone more easily due to the increased amount of blood in circulation and compression caused by the pregnant uterus. It is useful to wear elastic stockings, comfortable shoes with low heels and avoid standing still for long periods of time. It is advisable walking and taking every opportunity to drain blood from the veins by resting the legs on a raised surface.



Breast tenderness

Right from the first few weeks of pregnancy, an increase can be noticed in the volume of the breast causing tenderness, which is often irritating and painful.

From halfway through the pregnancy onwards, many women notice a milky secretion from the nipples.

These are not pathological signs but just hints that the mammary gland is getting ready for breast feeding.



Heartburn

Especially towards the end of pregnancy an irritating burning sensation can be felt at the entrance to the stomach when lying down or bending over (pyrosis), due to compression exerted by the pregnant uterus causing reflux of gastric juices into the oesophagus. To prevent this discomfort, it is useful to split meals during the day, chewing food thoroughly and avoid lying down immediately after a meal. If the problem persists, the doctor may prescribe antacids.

Obstetrical Emergency Room

All pregnant women experiencing problems or requiring advice during the course of pregnancy can refer to the family doctor, their gynaecologist or the reference obstetrician and the medical assistance doctor ["emergency medical service" ("guardia medica") on active duty on holidays and night time].

Only in an emergency they should go directly to the Santorso Hospital Emergency Room. By going to the General Emergency Room, a triage will be done: a specialised operator will assess the problem and will assign a priority code.

Depending on the result of this assessment the expectant mother will be directed, or will be accompanied to the Obstetrical Emergency Room.

The Obstetrical Emergency Rooms, located on the second floor next to the delivery rooms, are always open during the day and on call at night, ringing the bell next to the entrance to the delivery rooms.

A staff member (generally the obstetrician) will let in the mother-to-be and notify the doctor on the examination and verifications considered relevant (scans, examinations, cardiotocography). If doctor believe that a period of observation is necessary, the patient might be kept under O.B.I. (short intensive observation), for few hours.

Expectant mothers admitted to an Emergency Room are not exempted from contributing to expenses, unless in emergencies.

LABOUR AND DELIVERY

Labour and delivery are normal phenomena and must be left to progress spontaneously as far as possible. The doctor and midwife will monitor the progress of labour and will be ready to intervene if any risk for the mother or baby occurs.

The Alto Vicentino Santorso Hospital Obstetrics Ward

The entire obstetrics ward was planned with the intention of making new mums feel a bit more at home during such a delicate moment of their lives.

It is divided into two sections, both on the second floor: one that encompasses the facilities of the Obstetrical Emergency Rooms and the delivery rooms and the other reserved for the hospital stay after delivery.

When contractions become intense, frequent and regular, the expectant mother is admitted to one of the labour rooms. From the General Emergency Rooms, these are reached by going up to the Obstetrical Emergency Room on the second floor. Here the future mother and her husband will have a labour-delivery room available totally for themselves, being aware of the fact that the mother needs to be in contact with the newborn child, squat, change position, vent her feelings, talk or just be quiet.

The mother is never left alone because she is always with her baby and the with the baby's father.

During labour, the mother should never fast but it is advised to drink and eat small snacks (biscuits, honey, jam) to recover strength.

Only when the midwife senses that the fateful moment has arrived and that the baby will be delivered, she will not transfer the mum to the delivery room as was used in the past, but the bed used during labour will simply be changed into a delivery bed.

Santorso features a **number of eight labour-delivery rooms**, all equipped with the necessary to assist vaginal delivery and to provide the newly born baby with the first care needed. One of the labour-delivery rooms is equipped with a tub for **labour and delivery in water**, one with a "round delivery bed" to encourage alternative positions, all guaranteeing appropriate assistance.

Each room is equipped with a vast bathroom with shower and the possibility of labour in various different positions is guaranteed, even with the use of a specific "balloon", stool, etc.

During labour, in fact, the mother-to-be can assume the position she considers most comfortable, unless differently advised by the midwife or the doctor, if specific necessities arise.

Even considering labour pains to be a natural occurrence due to contractions, we can help the mother control them through appropriate labour positions and correct breathing, massage, water labour (in bath tub or shower) and even **analgesic-assisted birth** if it becomes necessary at any time.

After delivery, as soon as the baby has been checked, it is given back to the mother as the contact with her skin enables a certain degree of heat to be maintained. The external room temperature, though deliberately maintained at a high level, is much lower than that of the mother's womb.

Mum, dad and baby remain in the same room for a couple of hours: the new mum puts the baby to the breast and keeps it warm and both are periodically checked by the midwife to prevent haemorrhages. **Skin to skin contact** between mother and baby is encouraged, as well as **early latch-on and suckling**, to ensure imprinting (bonding), the milk development and to avoid haemorrhages.

Two hours later, mum and new born get transferred to the obstetrics ward and, thanks to **rooming-in** they could always remain together, depending on requirements. The father can return home to spread the good news and to rest. The ward has rooms with two-beds, and a comfortable space is provided for the new father as well.

All rooms planned for the hospital stay have a spacious bathroom with shower, a baby changing table and sink: the mothers themselves will change their babies, receiving instructions and advice from the paediatricians.

We recommend all mums, including those who have given birth by Caesarean section, to put the baby to the breast immediately to encourage milk secretion, and to resume uterus contractions, which is useful to prevent haemorrhages and, most importantly, to encourage contact between the mother and her baby.

Recovery after delivery is generally very quick. Mothers are invited to get up fairly quickly and start eating soon to encourage milk secretion. The hospital stay is only two-three days for natural births and from three to five days for Caesarean sections.

Spontaneous Childbirth and Surgical Delivery

Spontaneous onsets of labour and vaginal delivery are encouraged as much as possible. We only intervene by inducing delivery in cases of pathologies (diabetes, gestosis, retarded growth, reduced amniotic fluid) or when the pregnancy is overdue (after the 41st week and 5 days). To induce birth, we no longer use the oxytocin drip but the more convenient gels which are applied to the vagina.

Some time ago we abandoned the use of the old forceps and very few babies are delivered using the vacuum extractor. This is used when necessary in the interests of the baby, but parents do not need to be worried as modern vacuum extractors are made of rubber and do not deform the baby's head.

Near the delivery rooms are located the surgery rooms for Caesarean deliveries. The Caesarean team (gynaecologists, anaesthetist, paediatrician, obstetrician, nurses) is always ready to cope with any emergency, 24 hours a day. Caesarean section, though useful in certain cases of disease to prevent issues for the mother and baby, is still a surgical operation and as such may lead to complications. It is therefore reserved only for cases of actual need.

Thanks to the constant presence of the whole emergency trained team, we can safely offer **the chance to give birth naturally after a previous Caesarean** section to the mother willing to try, with external turning manoeuvres, to transform the podalic situation into a cephalic one, and **to allow twins to born naturally.**

Episiotomy, in other words the incision to widen the opening of the vulva, is carried out by the obstetrician only in cases of real necessity, to prevent tearing of the perineum and to help the baby's head come through. Threads that can be absorbed by the body and not require removal are used for the stitches.

Pain relief in labour

In the labour and delivery rooms there is respect for pain as a natural event linked with contractions. The pain of labour is not a punishment, nor is bad and satisfaction gained from childbirth does not necessarily depend on the absence of pain. Pain management should be one of the subjects covered during the childbirth preparation classes.

However if the experience of pain present a risk of overwhelming the

mother to-be, epidural pain relief could be extremely useful. Epidural pain relief is still today considered the most effective and safe pain-relieving technique for controlling pain during labour ⁵. Analgesia is done by inserting, with the aim of a guide-needle, a small catheter into the epidural space of the lumbar vertebrae, between one vertebral body and another. Local anaesthetics and/or painkillers are administered through the catheter. If practiced by our expert and dedicated anaesthetists, it provides a high degree of safety; however it is advised against a number of situations (neurological disorders, haemorrhagic syndromes, obstetric conditions which do not allow it to be performed) and there may be complications, though this rarely happens, (in less than 1% of cases there may be a headache on the days following delivery, which however disappears with bed rest, regular fluid intake and pain relief).

The role of the father

The number of future fathers who choose to share their partner's pregnancy and be present at check-ups, scans, and prenatal courses is constantly on the rise. Being present and helping the future mum in labour and in the delivery room is the natural conclusion of a path they started together.



Future fathers frequently ask what they can do during labour. Knowing how to behave is a source of comfort, especially to men. In actual fact, the birth of a baby has little to do with taking action.

The quality of the partner's presence, sharing emotions and affection are the best help they can give a woman. The father is there to encourage,

⁵ Free pain reliefs are guaranteed in our delivery rooms for all expectant mothers who request it, as long as there are no reasons why anaesthetic cannot be given or obstetrical contra indications.

If you intend to take advantage of pain relief, it is essential to take part in an informative, collective meeting or, alternatively and in the case of specifically problematic issues, make an individual appointment with the anaesthetist beforehand, during the final months of pregnancy (anaesthesiological check-up).

For the latter ask your family doctor to prescribe you an anaesthesiological check-up and then book the appointment through the centralised booking service CUP (Centro Unico di Prenotazioni). Taking part to the informative group meeting, instead, is free and needs no prior booking. For further information, consult the ULSS 4 Company website or ask your gynaecologist.

comfort, support and cope with all the needs that may arise, from getting a glass of water to giving a massage. He also plays an important role in creating a bridge with the family members awaiting the happy event.

Being present at the birth of one's child is one of the deepest and most intense emotions we can experience. However both partners must agree on the father presence in the delivery room.

No one should feel guilty if he feels he cannot cope, or she prefers to be alone during delivery. Although delivery is an extraordinary event for a couple, it does however involve highly sensitive issues surrounding female intimacy, which must be respected.

Donating the umbilical cord blood

The blood contained in the placenta and umbilical cord is extremely precious as it is rich in blood-forming stem cells, in other words the cells which generate red and white blood cells and platelets.

They can therefore be used, often as an alternative to bone marrow transplants, to cure serious blood and immune system disorders.

After childbirth, normally this blood is discarded together with the placenta.

However, it is sufficient for the mother to make the choice during pregnancy for it to be collected and destined for transplanting in children and adults suffering of serious pathologies.

The personnel of the Obstetrics Ward, together with the Paediatric Immune-transfusion Service (SIT), and the Verona Cord Blood Bank are involved in the project for donating blood from the umbilical cord.

After an accurate assessment of the suitability of the aspirant donor, responsibility of SIT, the units of umbilical cord blood collected from the delivery rooms will be sent to be preserved at the public Cord



blood bank of the Integrated University Hospital Company of Verona ⁶. Donation is harmless for the mother and baby as the blood is collected after delivery and after the umbilical cord has been cut.

All women at risk of transmitting viral, genetic or sexually-transmitted diseases or immune system disorders are excluded from donation.

Hospital visits

In the Obstetrics Ward, for privacy respect of the breastfeeding mother and her infant, as well as the regular checks carried out by the staff (ward obstetrician, nurse, paediatrician, nursery staff and gynaecologist) **visiting hours are only from 7 pm to 8 pm every day, including Sundays and holidays.**

From the entrance hall, staircase C leads to the ward on the second floor. No visits are permitted at any other times. Only fathers can remain in the rooms from 3 pm until 8 pm.

Preparing for the event

We recommend the mother's suitcase is packed ahead of time with comfortable clothing for labour (nightdresses, slippers, ankle socks, disposable mesh briefs), sanitary towels for after delivery, and toiletries. Do not forget your pregnancy file ("Cartella della gravidanza") with the scan and test findings (your blood group, viral hepatitis markers and the results of the vaginal-rectal swab are essential). For the baby, the baby nurses recommend you prepare four or five parcels each containing a set of clothing for new-born babies in fabric suitable for the time of year. In spring and summer: a short-sleeved wool and cotton vest, a cotton baby smock, cotton or terry towelling leggings, a pair of booties or cotton socks and a pair of cotton pants to wear over nappy.

In autumn and winter: a long-sleeved wool and cotton vest, a woolen baby smock, plush, terry-towelling or woollen leggings and a pair of booties or woollen socks ⁷.

You must come to the hospital if you are losing any amniotic fluid or blood or have frequent, regular, painful contractions. In programmable

⁶ For information and appointments to establish eligibility call the Immune-Transfusion Service at the Santorso Hospital on no. 0445-571465, Monday to Friday from 1 pm to 3:30 pm, mail: cts@ulss4.veneto.it

⁷ Leaflets containing useful information on baby clothing, baby hygiene and keeping the umbilical cord clean are available in the Nursery Section. Further specialist advice can be obtained from the baby nurses of the Santorso Hospital or from the obstetricians and assistants of the Basic Health Districts.

instances (as for example in elective Caesarean births or in programmed induction of labour) it will be your gynaecologist that will programme it directly, or will provide you with the necessary instructions for admission.

Guided Visit of the Delivery Rooms and of the Obstetrics Ward

The Obstetrics Ward professionals periodically accompany mothers-to-be and future fathers on a guided visit of the delivery rooms, neonatal department and the rooms in which they will be staying in the Obstetrics Ward. Groups meet every first and third Thursday of each month, at 1 pm at the porter's desk in the hall of Santorso Hospital.

This represents a chance to become familiar with the environment and its personnel: a gynaecologist and a paediatrician attend to reply to the questions and curiosity of the participants.

Why have your baby at Santorso?

- Even though promoting the naturalness of the event, training is provided to face emergencies, guaranteeing a maximum level of safety;
- because there is an excellent quality of neonatal medicine, able to deal with new born babies, even if very premature;
- because rooming-in and breast feeding are promoted;
- because umbilical cord blood can be donated, giving every mother and her baby the chance to make a really generous gesture;
- because help in dealing with pain is available, even by analgesia- delivery at any stage, when considered appropriate;
- because labour in water or under a shower is available;
- because even if the previous birth have been by Caesarean incision, an attempt of vaginal delivery can be carried out in complete safety;
- because during twins pregnancies, vaginal delivery can take place without risking the safety of the twins;
- because even when the foetus is in a breech position, changing its mind can be attempted;
- because we are the friends of babies and mums.

POSTPARTUM PERIOD

The postpartum period is the 30–40 days following delivery. It is a period of adjustment for the mother's body. The birth of a baby is an extraordinary event which provokes profound hormonal, physical and psychological changes in a woman, but in addition practical changes and changes in the relationship between the couple who have to take



care of the baby. This is a very special time; usually there is a period of feeling exhausted and relaxed due to the considerable effort of the pregnancy and childbirth. You do not have to feel guilty if you find it hard work to look after the baby. These feelings are completely normal and will disappear over a short period of time.

During this time, the woman's genitals return to normal. The uterus, which grew considerably in size to accommodate the foetus, gradually shrinks back to normal in about six weeks. After-pains and the presence of lochia are evidence that this is happening.

After-pains are painful cramps which affect the lower stomach, especially during breast-feeding and are due to the uterus contracting to return to its pre-pregnancy size.

They disappear naturally when the uterus resumes its normal size. You just need to be patient. The doctor can prescribe pain killers if they are very painful.

Lochia is a blood vaginal discharge which may last from twenty to forty days. Initially it is fairly copious and red in colour due to the blood and clots contained, but as time goes by it diminishes and becomes lighter in colour as the amount of blood it contains decreases.

Lochia also appears after a Caesarean section, but in this case does not last as long, as the surgeon cleans the uterus during the operation. While losing lochia it is essential to clean the genital area carefully and avoid the use of tampons which would prevent the discharge from leaving the body, exposing it to a risk of infections.

You will need to consult your doctor only if there are no signs of the discharge diminishing as days go by or if it is foul smelling as this could be a sign of infection ⁸.

During the postpartum period, a number of minor temporary disorders may arise. An example are the urine leakings after slight physical efforts

⁸ We recommend all new mums to consult their gynaecologist 40-60 days after delivery to check the condition of the uterus and discuss any problems and contraception. Free check-ups are available at our local surgeries (ambulatori divisionali) by prior booking.

due to the weakening of the perineum muscles (the muscles which close off the pelvic floor). If these persist, consult the obstetrician or gynaecologist who will recommend some simple exercises to restore the pelvic floor to its original tone.

Polyuria (the need to urinate frequently) and heavy sweating are frequent during the first few days after delivery to eliminate excess liquids accumulated during pregnancy.

Any haemorrhoids appeared during the final term of pregnancy may also persist during the postpartum period. It is important to overcome constipation by eating a diet which contains plenty of fibre and water and taking any medicines prescribed by your doctor.

Excess weight gained during pregnancy should be lost slowly by combining a good diet with physical activity. Prevention in this case is extremely useful: if you want to lose weight quickly just don't put on too much during pregnancy!

Sudden changes in hormone levels might cause temporary hair loss. Hair will start to grow again properly once hormones return to their normal levels.

Breastfeeding

Breastfeeding is not only desirable because it is directly related to the health of both baby and mother, but must be considered a right to all effects and purposes for both because it is a privilege which nature has reserved for the mother and her baby. The three main advantages for the baby are nutritional, protective and psychological. Mother's milk in fact contains all the nutrients the baby needs, protects against a number of illnesses by improving immune defence (reduces the risk of infections,



allergies and diabetes) and the close contact between the mother and baby encourages its psychological development. The mother also benefits both physically and psychologically. Immediate physical benefits include a greater production of oxytocin (the hormone which makes the uterus contract), less bleeding after delivery, faster returning of the uterus to its normal size, and faster return to pre-pregnancy weight.

Breastfeeding also means investing in the future as it reduces the risk of cancer of the reproductive organs (ovaries and breasts) and osteoporosis in old age. From a psychological point of view, it also helps the mother to bond with her baby, increases the mother's self-esteem and helps to prevent postnatal depression.

Secretion from the nipples starts with the production of a small amount of yellow liquid called colostrum. It is the most suitable food for the first few days of life as it is extremely nutritious. Only after the breasts fill with milk, which generally happens on the third to fifth day following delivery, are there sufficient quantities of milk in the right composition to meet the baby's needs. In the first six months of the baby's life, only maternal breastfeeding is advisable.

Nothing extra is needed, not even water, because when the baby first starts suckling, the milk is more diluted and this quenches the baby's thirst. Pathologies and medicines that could prove contrary to maternal breastfeeding are rare. In doubt, consult the paediatrician. Breastfeeding also acts to a certain degree as a natural contraceptive because it delays resumption of ovulation, but it is not 100% safe. Before resuming sexual activity, we recommend you talk to your gynaecologist about contraception as certain forms can also be used while breastfeeding.

Postnatal depression

A slight, temporary depression is moderately frequent. It appears in the first few days after delivery, often coinciding with the return home of the new mother. The new mum tends to cry a lot and seems to be low in spirits and pessimistic about her ability to look after the baby. She is hypersensitive, easily irritated and feels neglected by the members of her family. She has frequent mood swings, ranging from joy to anxiety, especially when the baby cries or the normal difficulties encountered in breastfeeding arise. In these cases the best support can only be provided by the partner, whose job it is to help her overcome this stage, making her feel wanted, helping to look after the baby and relieving her of housework.

In some cases this state, which should not last any longer than about ten days, persists or appears later on, peaking between the third and sixth month, and manifests more serious symptoms. The new mum is depressed, irritable and often feels discouraged and bursts into tears. Debility (tiredness), lack of appetite, insomnia, weight loss and phobias (fears for no reason) may also appear.

In these cases too the best support comes from her partner and members of the family, but external help is also needed. Symptoms must not be ignored or underestimated. It is essential to consult your doctor immediately, who will recommend you a specialist to make sure you receive the appropriate therapy ⁹.

VACCINATIONS

Promptly safeguard your baby from Infectious Diseases

Infectious Diseases represents a major threat for the baby's health from the first year of life.

The immunity conveyed from the antibodies of the mother during pregnancy and breastfeeding does not last, nor cover all the possible diseases that could infect the baby.

Therefore it is essential that the vaccines programme required for infancy starts early, from the second to third month.

Vaccines are one of the most important discovery in medicine as well as the most effective method to fight against severe and life-threatening infectious diseases, and/or illnesses that could lead to dangerous complications, of which a successful cure often does not exist.

Vaccination is a safe preventive medical procedure and of proven efficacy, recommended from the World Health Organisation and practiced all over the world.

Take part in vaccinations, as well as being the safest and most effective method to protect the newborn from infectious diseases, is in addition

⁹ There are various types of postnatal depression, based on the seriousness of the symptoms. Specialists identify these as: post partum blues (slight temporary depression during the first few days), minor depression and major depression (similar to non-postpartum depression).

a gesture of solidarity towards the infectious diseases' assessment for all the population.

Babies born in the Veneto region from 2008 onwards are not legally obliged to be vaccinated. This does not stand for a less importance of vaccines, but that the Region believes in a conscientious adhesion from parents, rather than a compulsory obligation.

For more information see the website of ULSS4 <http://www.ulss4.veneto.it/web/ulss4/DSS/ulss4/Prevenzione/vaccinazioni>, seek advice from the nearest vaccine centre, talk with free choice pediatric doctor. You can also send a mail to the following address: vaccinazioni.thiene@ulss4.veneto.it or vaccinazioni.schio@ulss4.veneto.it

**Useful telephone numbers and Web Pages for mothers to-be
For further information and updating, the Ulss 4 Alto Vicentino
web pages dealing with Obstetrics should be consulted**

(from the ULSS 4 website, click on: Hospital > Obstetrics and Gynaecology > WHAT WE DO).

Centro Unico di Prenotazioni (CUP) 0445-633633

ALTO VICENTINO Santorso HOSPITAL

Switchboard 0445-571111

Mother-Infant Department Secretarial Office 0445-571743

Obstetrical Emergency Rooms 0445-571776

Cardiotocography Services
(for bookings, call between 10 am and 6 pm) 0445-571776

Prenatal Diagnosis and Centre for Medically
Assisted Procreation (for prenatal diagnosis
appointments: call between 2 pm and 4 pm
on weekdays) 0445-571660

Obstetrics Ward 0445-571705

Gynaecological Ward 0445-571699

Neonatal Department 0445-571706

Immune-transfusion Centre
(for appointments regarding blood cord donations:
Monday to Friday, between 1 pm and 3:30 pm) 0445-571465

Centralised booking service 0445-633633

Thiene Basic Health District No. 1 (formerly “Boldrini” Hospital)

District Health and Social Care Centre

Switchboard	0445-388111
Family Counselling Service	0445-388930
Community Paediatrics (Health Assistants)	0445-388976
Continuing Care Assistance (Emergency Medical Service “Guardia Medica”)	800-239388

Schio “Casa della Salute” (formerly “De Lellis” Hospital)

District Health and Social Care Centre

Switchboard	0445-598111
Family Counselling Service	0445-509059
Community Paediatrics (health assistants)	0445-598200
Continuing Care Assistance (Emergency Medical Service “Guardia Medica”)	800-239388

Maternity Outpatients Assistance
(at the former Malo Hospital)

Malo Integrated Medicine Surgeries

(at the Muzan Retirement House, via Barbè 39)

Maternity Outpatients Assistance	0445-586721
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Piovene Rocchette District Healthcare Centre

Family Counselling Service	0445-659129
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