BEVOLKINGS ONDERZOEK AANGEBOREN AANDOENINGEN

Newborn screening in Flanders

BEVOLKINGS ONDERZOEK

Universitair Ziekenhuis Brussel

Newborn screening for 11 metabolic and genetic diseases

A small amount of children are born with a congenital disease. These diseases are present from the moment of conception, but are, mostly, only visible after some months and even years after birth. Most of these diseases are detectable in the blood.

These diseases, that are screened for in the blood, are life-threatening and/or can cause severe brain damage. In the beginning of life, the child appears to be perfectly normal and healthy, however, after time passes, the invisible damage gets worse and apparent. The time-laps is depending on the disease.

If the congenital disease is discovered early in life, it can be treated successfully, and severe brain damage and handicaps can be avoided.

Therefore, all children born in Flanders are given the possiblity to be screened for eleven congenital disease. For this analysis, dried blood spots are used. These eleven disease, based on their causes, are subdivided in 4 main categories:

- hormonal dysfunctions (adrenal and thyroid gland)
- deficits in the metabolism of proteins (fenylalanine, MSUD, MMA/PA, IVA and GAI)
- deficits in the metabolism of fat (MCADD and MADD)
- deficits in the availability of the vitamin biotin

Please do not hesitate to contact your physician or mid-wife if you need any explanation concerning the 11 diseases or the procedure. This screening is not mandatory, but is strongly advised.

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The heel prick and the bloodscreening

The heel prick should be preformed between 3 and 5 days after birth. Typically, this will be done in the hospital. With home births or when the babies leave the hospital prematurely, the heel prick will be done by the mid-wife or a physician.

The blood can be drawn from the heel, but also from the palm of the hand.
The dried blood spots, will be send to one of the two laboratories recognized by the Flemish government.

All costs will be covered by the Flemish government

Please do not hesitate to ask if your child has been screened

If the results of the blood screening are normal, you will not be contacted.

In rare cases, the results of the blood screening can be divergent. Your physician will contact you and notify you of the need of a second test. This will be between one and three weeks after the original blood draw. If the original positive results are confirmed by a second test, appropriated treatment will be started.

Treatment

If the disease is found early in life, the appropriated treatment will be successful in most cases. This early treatment, will prevent a lot of grief. The treatment is depending from the disease found. The treatment can be either a diet or a medication or a combination of both.

For the diagnostics and the adequate treatment, you will be referred to one of the specialized centers. All costs will be covered by the health insurance.

Protection of privacy

All dried blood spots, will be stored during 5 years in a safe and protected environment. You have the right to notify the laboratories to destroy your babies dried blood spots.
All the conserved cards are only used for the newborn screening, with exception of scientific research. These research is only authorized if an ethical commission gives green light and all the laws concerning privacy are obeyed by. This dried blood spots can also be used for other diagnosis on the specific request of your physician and yourself. To this end, both your physician and yourself have to send a signed letter to the laboratories.

More information

If you need any further information, please do not hesitate to contact:

Vlaams Centrum Brussel voor opsporing van
aangeboren metabole aandoeningen (VCBMA)

UZ Brussel Kinderziekenhuis
Laarbeeklaan 101
1090 Brussel
Tel: 02 477 2581
Email: neonatalescreening@uzbrussel.be
labopediatrie@gmail.com