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News about Down's syndrome screening...

The ruling of 6 July 2009, which appeared in the Official Journal of 27 October 2009 and was applicable on 27 November 2009, proposes three screening strategies for Down's syndrome using maternal serum markers:

➔ Combined screening in the first trimester of pregnancy

Sampling between 11.0 and 13.6 weeks LMP

- Serum markers of the 1st trimester (Beta-hCG + PAPP-A) and measurement of nuchal translucency
- Single-foetus pregnancy
- Joint ultrasound information (measurement of nuchal translucency & craniocaudal length)
- Membership no. of sonographer in a perinatal network

➔ Integrated sequential screening in the second trimester

Sampling planned between 14.0 and 17.6 weeks LMP

- Serum markers of the 2nd trimester (Beta-hCG + AFP + Estriol) and measurement of nuchal translucency
- Single-foetus pregnancy
- Joint ultrasound information (measurement of nuchal translucency & craniocaudal length)
- Membership no. of sonographer in a perinatal network

➔ Second trimester screening with maternal serum markers

Sampling planned between 14.0 and 17.6 weeks LMP

Maternal serum markers of the 2nd trimester (Beta-hCG + AFP Estriol)

For this purpose, you can find on our website:

- a new clinical information form for collection of all data which is essential for the proper performance of this examination
- a new calendar of sampling dates which combines those of the first and the second trimesters
- all the practical information you need
- responses to frequently asked questions

http://www.lab-cerba.com/protocoles_bio.asp (section: Analyses information / sampling requirements / biology)

Focus on... Focus on... Focus on... Focus on...

Antiglobulin test and pregnancy.....

Legal obligations for the biologist

In terms of antiglobulin testing, the decree of 26 April 2002 regarding the proper performance of medical laboratory analyses states that:

- ... *“in the event of positive screening, antibody identification is mandatory.”*
- *“Titration, inseparable from the detection of anti-red blood cell antibodies, is mandatory in all pregnant women with IMMUNE antibodies.”*
- *“for the antibodies of the Rh system, the combination with quantitation is necessary in order to gain a better understanding of the antenatal haemolytic risk.”*

Recommendations of the French National College of Gynaecologists and Obstetricians (2005) and the legal obligations of the prescriber

In addition to the policy of prevention targeting anti-D alloimmunization that was set up at the end of the 1970's, there is now the proposal for a systemic injection of 300 µg of anti-Rh(D) immunoglobulins (Rhopylac®) at 28 weeks LMP in Rh(D)-negative women who are carrying or are suspected of carrying an Rh(D)-positive child.

The implementation of “targeted and routine” prevention has led to new difficulties in the interpretation of antiglobulin testing during pregnancy. In fact, the legal calendar for antiglobulin testing in Rh-negative pregnant women remains unchanged today and provides for its performance in the 3rd, 6th, 8th and 9th months of pregnancy. And yet the presence of passive anti-Rh(D) is still detectable 3 to 4 months after the injection, depending on the dose(s) injected (200 or 300 µg) and the sensitivity of the techniques used for antiglobulin testing (the enzyme techniques stay positive the longest).

Information on the injection of anti-RhD immunoglobulins (Rhopylac®)

As stated in the last Cerba News, any request for the identification of antiglobulins in RhD–negative women must be accompanied by information about any anti-D injections.

- **Anti-D injection (Rhopylac®)** : **yes / no**
- **If yes, date** :
- **Dose injected** : **200µg / 300 µg**

This information is essential for interpreting the antiglobulin testing result, and for **making a distinction between passive anti-Rh(D) and immune anti-Rh(D) status**, with this latter requiring titration and dosing in order to assess the foetal and neonatal haemolytic risk (quantitation done at the National Center of Reference in Perinatal Haemobiology: technical turnaround time of about 10 days).

The lack of such information can result in two types of interpretation error:

- To wrongly conclude as to the presence of passive anti-Rh(D), while the patient presents with an unknown immune anti-Rh(D), the risk being that the condition is left to progress without appropriate alloimmunization monitoring, potentially resulting in severe foetal or neonatal injury
- To wrongly conclude as to the presence of immune anti-Rh(D) if no information is provided concerning a recent injection, resulting in two consequences: the institution of close monitoring which is pointless and anxiety-provoking, and the negation of the subsequent indication for Rhophylac® (as the patient has been labelled as immune).

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Public holidays... Public holidays... Public holidays... Public holidays...

Our customer hotline will be closed on **Friday, 25 December 2009 and Friday, 1 January 2010** and we will not make any collections on these dates.

On the Thursdays of 24 and 31 December, our customer hotline will be closed from 4.30pm, and we ask you to please not collect any samples for the following analyses:

HLA Class I, lymphocyte subpopulations, cellular allergy tests, CMV antigenemia, lysosomal enzymes, constitutional karyotypes and all bone marrow analyses.