## THE STUDY OF TYPES AND TITRES OF ANTI - CARDIOLIPIN ANTIBODIES IN WOMEN WITH ADVERSE PREGNANCY OUTCOMES

Gromiko G.L., Zubgitskya L.B., Starovoitov V.A.

I.P.Pavlov Medical University, D.O.Ott Institute of Obstetrics & Gynecology, St.-Petersburg, Russia

**Objective:** Anti-cardiolipin antibodies (aCL) associated with various obstetric complications and subject to thrombosis of placental vessels. aCL associated with thrombosis does not directly bind to CL itself, but to  $b_2$ -glycoprotein  $I(b_2$ -GP I) which attached to CL. Our purpose was to study the actions of aCL and anti-cardiolipin  $b_2$ -glycoprotein I complex antibodies (anti-CL: $b_2$ -GP I) on pregnancy outcomes.

**Methods:** Sera from 80 pregnant women with adverse pregnancy outcomes (recurrent miscarriages, intrauterine dearth, severe preeclampsia and IUGR) were detected on presence of aCL and anti- $CL \cdot b_2$ -GP I by enzyme-linked immuno-sorbent assays (ELISA kits, YAMASA). The diagnosis "placental insufficiency" was certified morpho-

logically in all patients.

**Results:** anti- $CL \cdot b_2$ -GP I in low and moderate titres (1,3-8,0 Units/ml) was detected in 10%, in high titer -50 U/ml in 1,25% of women. aCL in low and moderate titers - in 29% and in high titers - in 9% of women. In the half of women with low or moderate titres of anti- $CL \cdot b_2$ -GP I were another symptoms of anti-phospholipid syndrome - thrombocytopenia and livedo reticularis. In one woman with high titer of anti- $CL \cdot b_2$ -GP I ileo-femoral thrombosis was occur on 31 week of pregnancy. Among women with aCL in low and moderate titres viral and streptococcal infections was found in majority of cases. Only one of high titer aCLs women has lupus-like disease. None of other patients fulfilled the diagnostic criteria for autoimmune diseases and had any history of thrombosis. Among women with anti- $CL \cdot b_2$ -GP I most pregnancies ended by miscarriage and intrauterine dearth in II-III trimesters. Most characteristic complications of pregnancy among women with aCL were severe preeclampsia and IUGR.

**Conclusions:** Therefore the adverse pregnancy outcomes can be connected both with anti- $CL \cdot b_2$ -GP I and with aCL and depends a little from the titer of antibodies. The underlying mechanisms of actions of different types of aCL on

placental function required the further elucidation's.

## **DELIVERY AT DANDERYD HOSPITAL - THE CURRENT CONCEPT**

D. Gross-Witkow and M. Nyman

Division of Obstetrics and Gynaecology, Karolinska Institutet Danderyd Hospital, Danderyd, Sweden

The current perinatal mortality, 0.47 %, at Danderyd Hospital, and the low perinatal and maternal mortality in Sweden, is mainly connected to the maternal health programme, that was introduced in the 1940:s. Also, the improved health status of the mothers has had a great impact. Information to the mothers, surveillance of the pregnancies, and identification of high risk pregnancies, is important. Parental education nowadays plays an important role.

In the mid-1960:s, the fathers were allowed into the delivery room. Rooming in for the babies in day time was introduced in the 1970:s, and "around the clock" rooming in became common around 1990. At that time the children's ward was taken away. This means that the mother and the infant are kept together all the time, except if the child needs pediatric surveillance and treatment at the neonatal intensive care unit (NICU).

Approximately 1975, shaving of the mothers' pubic hair prior to parturition and desinfection with chlorine solution was abandoned. Around 1988, after careful investigation, it was decided unnecessary to have sterile conditions in normal delivery. Today, we have what we call "clean delivery" in all normal cases. Instruments are sterilized, however. When instrumental deliveries or big ruptures that need suturing occur, the patient goes into the operating theatre with usual sterile conditions.

During cesarean sections, the father is usually present throughout the whole procedure, unless the mother has general anesthesia (in which case the father usually is present until she is put to sleep), or if there is an extremely urgent emergency cesarean section.

Often the father stays with his family during the hospital period, at least if it is the first child.

Visits at the postpartum wards are allowed freely by the father and sisters and brothers, unless there is a period of epidemic, like influenza or RS-virus.

Mothers in Sweden are allowed to stay at home and care for their newborn baby for 18 months, of which 12 months are with "sick leave" salary. The period can be shared between the parents, and quite a few men take "baby leave" for part of the time. The father is allowed 10 days for "paternity leave" in connection with the delivery.

A video of upright position at parturition and a video of a scheduled cesarean section will be shown.