

CHLAMYDIA TRACHOMATIS IN PREGNANT WOMEN AND THEIR NEWBORN BABIES

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Jones B. et al. are the first to detect a correlation between isolation of *Chlamydia trachomatis* (CT) from cervix of pregnant women and conjunctivitis neonatorum chlamydiosa (CNC) in their babies. The frequency of CT infections among gynaecologic inflammatory diseases in Bulgaria is about 28 % which correlates to foreign authors. The purpose of the present work is to study CT rate and its role for perinatal infections (maternal and newborn pathology) using modern express methods. In 1990, 86 women and their newborn babies were investigated. A group of 40 patients had certain perinatal complications (group I) and was 22,9 years and in group II - 23,6 years. The difference was not significant ($p > 0,05$). Gestational age and baby's weight in both groups were respectively 38,6 gestational weeks and 3 300 g (I) and 39,4 gestation weeks and 3 420 g (II), respectively. The difference was not significant ($p > 0,05$). Blood sera of mothers and babies, as well as their conjunctival and nasopharyngeal secretions were investigated. Indirect immunoperoxidase assay (IPA) for detection of specific Ig A and Ig G antibodies to CT was performed by kit of "Savyon Diagnostics" Ltd (Israel). The secretion smears were prepared by Giemsa-staining and specific changes for CT were observed. Titers of Ig A 1:8 and Ig G 1:32 were assessed as significant. Correlation statistical analysis was applied. The results of mother' blood sera tested by IPA are presented on table 2. There is no significant difference between CT positive patients rate in both groups - 5,81% v.s. 4,65% ($p > 0,05$). There is no complete correlation between contaminated mothers and their babies. Only 7 of the babies born by 9 positive women show significantly high specific Ig G against CT (table 3). No significant titers of CT Ig A are registered in babies sera, where microscopic signs for CT infection are found. The absence of Ig A and the presence of significantly high titer of Ig G 1:128 is probably a result of materno-foetal transplacental antibody transfusion. In 5 (5,81%) babies symptoms of conjunctivitis and in 2 (2,33%) of rhinopharyngitis are detected. Microscopic preparations stained by Giemsa reveal out cells with specific cytoplasmic inclusions observed by magnification x 1000.

Table 1

Pathology	P.P.I*	Fever with unknown origin	P.R.F.M **	Total
I st group	14 / 35%	8 / 20%	18 / 45%	40 / 100%
II nd group	-	-	-	46 healthy

* Partus praematurus imminens

** Preterm rupture of foetal membranes

Our data show that CT infections rate in practical obstetrics is about 10%, i.e. not so low to be underestimated. According to results of investigated contingents CT infection has no specific role in the perinatal pathology, while its effect on women's sterility and infertility is obvious. Detection of CT etiology in newborns' conjunctivitis and rhinopharyngitis allows adequate treatment. Specific CT Ig G antibodies are passively transported from mother to their baby transplacentally. That is why no specific Ig A are found in significant quantities. Registered positive results in the control group obviously prove that asymptomatic CT carrying is rather possible. The obtained data determine the necessity of suggesting a prophylactic program for obligatory screening and treatment of pregnant women.

Table 2

Titer of anti- bodies by IPA*	IgG 1:128	IgG 1:256	IgG 1:16	C.T. positive
I st group	3	2	5	5 / 5,81%
II nd group	3	1	4	4 / 4,65%
Total	6 / 6,97%	3 / 3,47	9 / 14,65%	9 / 14,65%

Table 3

Groups	Weight	Age	IgG 1:128	Conjunctiva	Nose
I st gr.	3300	38.6	4	3	1
II nd gr.	3420	39.4	3	2	1
Total	p > 0.05	p > 0.05	7 / 8,13%	5 / 5.81%	2 / 2,33%