increased level of soluble forms of cytokines sIL-β, sIL-6 and sIL-10. The results (before and after surgery) differed statistically significantly from the control group and were below normal parameters. These findings (especially in semen plasma) constitute a strong argument about diminished fertility in patients after varicocelectomy.

http://dx.doi.org/10.1016/j.jri.2013.12.068

P38

Diagnostic and prognostic value of presepsin in preterm deliveries

Karin Malíčková[1,*], Michal Koucký[2], Antonín Pařízek[2], Květa Pelinková[1], Helena Brodská[1], Zdeněk Hájek[2], Anna Germanová[2], Oto Mestek[3], Tomáš Zima[1]

[1] *Institute of Medical Biochemistry and Laboratory Diagnostics, General University Hospital and 1st Faculty of Medicine of Charles University in Prague, Czech Republic*
[2] *Department of Gynecology and Obstetrics, General University Hospital and 1st Faculty of Medicine of Charles University in Prague, Czech Republic*
[3] *Institute of Chemical Technology Prague, Czech Republic*

Aim: To evaluate the association between serum presepsin (soluble CD14 antigen subtype, sCD14-ST) levels early after the signs of preterm delivery appeared and within 48 h of preterm delivery, before 34th and 37th gestational weeks; the comparison of presepsin and established markers of inflammation severity; and the possible additional value of concurrently evaluated ultrasound vaginal cervicometry with serum presepsin measurement.

Patients and methods: A total of 60 women were included. Serum presepsin was measured by chemiluminiscent immunoassay Pathfast Presepsin (Mitsubishi Chemical, Japan). Evaluation of cervical length in all women was conducted by transvaginal ultrasound.

Results: Three quarters of the women examined delivered prematurely. There were no age differences between cohorts with and without preterm delivery. Patients who delivered within 48 h of the analyses showed significantly higher presepsin concentrations compared with women with later deliveries. Higher presepsin was also proven for deliveries before week 34 compared with those who delivered after week 34 as well as with those who delivered before/after week 37. The optimal cut-off point for preterm delivery was established at the concentration of presepsin 623.5 pg/mL. Combined findings of cervical length shortening below 18 mm and presepsin level increasing above 454 pg/mL indicated a significantly high risk of preterm delivery.

Conclusion: Development of strategies for risk stratification and prediction of morbidity in preterm deliveries include identification of simple, rapid, and safe markers of inflammation in women who are at increased risk of preterm birth. This study provided new information, suggesting that elevated maternal serum concentrations of sCD14-ST could be such independent and relevant risk factors for preterm delivery.

Acknowledgement: Supported by projects PRVOUK P25/LF1/2 (2012–2016) of Charles University in Prague and RVO VFN 64165 of Ministry of Health.

http://dx.doi.org/10.1016/j.jri.2013.12.069

P39

The impact of antinuclear antibodies on paternal lymphocyte immunization in women with recurrent miscarriage outcome

Hanna Motak-Pochrzest[1,*], Andrzej Malinowski[2]

[1] *The Opole University of Technology, Opole, Poland*
[2] *Polish Mother's Memorial Hospital Research Institute, Rzgowska, Lodz, Poland*

Some reports, including our own, indicate that paternal lymphocyte immunization (PLI) is an effective and safe method of preventing pregnancy failure in women with recurrent miscarriage (RM) of unexplained etiology. The significance of a positive level of ANA titers is reported to be associated with a negative impact on implantation. The aim of this study was to determine the presence of ANA in sera of women with RM as to their potential impact on the outcome of PLI. The clinical examinations were performed on 100 women with a history of two or more consecutive abortions with the same partner registered at the Department of Operative and Endoscopic Gynecology, Polish Mother's Memorial Hospital – Research Institute, Lodz from March 2012 to September 2013. The tested group consisted of women with RM, in whom we could find no reason for abortion in clinical and laboratory investigations. All these women were investigated to exclude the known causes of RM: genetic abnormalities, congenital and acquired anatomical abnormalities of uteri, endocrinopathies (PCO, diabetes mellitus, thyroid and prolactin disorders), cervical infections, heritable and acquired thrombophilias. None of the participants had no evidence for autoimmune connective tissue disease. The husbands of these women showed normal spermiograms. Patients qualified for PLI after negative proliferative activity in mixed lymphocyte reaction test (MLR) < 30%. Antinuclear antibodies (ANA) were studied administering indirect immunofluorescence tests using laryngeal cancer HEP-2 cell culture as targets (Euroimmun). Sera with fluorescence at a dilution of 1:80 were considered to be positive. The group was divided: 50 patients with the presence of ANA titers in sera and 50 without them. The patients' age ranged from 23 to 45 years and number of abortions ranged from 2 to 6. Successful pregnancy outcome was specified by a live birth. The presence of autoantibodies in women with RM who underwent PLI has controversial connotations. We did not observe in our study any unfavorable influence of elevated titers of ANA on subsequent pregnancy in women after PLI.

http://dx.doi.org/10.1016/j.jri.2013.12.070