

ISSN 2509-4327 (print)
ISSN 2510-4780 (online)



Deutscher Wissenschaftsherold German Science Herald

№ 6/2017

Die Zeitschrift „Deutscher Wissenschaftsherold“ ist eine Veröffentlichung mit dem Ziel ein breites Spektrum der Wissenschaft allgemeinverständlich darzustellen. Die Redaktionsleitung versteht sich als Vermittler zwischen Wissenschaftlern und Lesern. Durch die populärwissenschaftliche Bearbeitung wird es möglich unseren Lesern neue wissenschaftliche Leistungen am besten und vollständigsten zu vermitteln. Es werden Untersuchungen, Analysen, Vorlesungen, kurze Berichte und aktuelle Fragen der modernen Wissenschaft veröffentlicht.

Impressum

Deutscher Wissenschaftsherold – German Science Herald

Wissenschaftliche Zeitschrift

Herausgeber:

InterGING

Sonnenbrink 20

31789 Hameln, Germany

Inhaber: Marina Kisiliuk

Tel.: + 49 51519191533

Fax.: + 49 5151 919 2560

Email: info@dwherold.de

Internet: www.dwherold.de

Chefredakteur/Editor-in-chief:

Marina Kisiliuk

Korrektur:

O. Champela

Gestaltung:

N. Gavrilets

Auflage: № 6/2017 (Dezember) – 20

Redaktionsschluss Dezember, 2017

Erscheint alle 2 Monate

Editorial office: InterGING

Sonnenbrink 20

31789 Hameln, Germany

Tel.: + 49 51519191533

Fax.: + 49 5151 919 2560

Email: info@dwherold.de

Deutscher Wissenschaftsherold – German Science

Herald is an international, German/English language, peer-reviewed, twice a month published journal.

№ 6/2017

Passed in press in December 2017

Druck: WIRMachenDRUCK GmbH

Mühlbachstr. 7

71522 Backnang

Deutschland

Der Abdruck, auch auszugsweise, ist nur mit ausdrücklicher Genehmigung der InterGING gestattet. Die Meinung der Redaktion oder des Herausgebers kann mit der Meinung der Autoren nicht übereinstimmen. Verantwortung für die Inhalte übernehmen die Autoren des jeweiligen Artikels.

INDEXING: Google Scholar, WorldCat, Index Copernicus, InfoBase Index, Journal Index, Citefactor, International Scientific Indexing, JIFACTOR, Scientific Indexing Services, International Institute of Organized Research.



JIFACTOR



CiteFactor
Academic Scientific Journals



Scientific Indexing Services



INTERNATIONAL
Scientific Indexing



MIAR

<http://miar.ub.edu/issn/2509-4327>

© InterGING

© Deutscher Wissenschaftsherold – German Science Herald

Hoshovska A.V.,*Professor's assistant, Candidate of Medical Sciences, Department of Obstetrics, Gynecology and Perinatology, Higher State Educational Establishment of Ukraine "Bukovinian State Medical University", Chernivtsi, Ukraine***Hoshovskyi V.M.***Deputy Chief Physician of Municipal maternity hospital №1, Chernivtsi, Ukraine*

PROGNOSTICATION OF DEVELOPMENT OF PLACENTAL DYSFUNCTION AND GESTATIONAL COMPLICATIONS IN WOMEN WITH VARICOSE VEINS

Abstract. *To apply the correlation method of sign with the purpose to prognosticate the development of placental dysfunction and certain complications of pregnancy in women with varicose veins. We have calculated coefficients of sign correlation concerning the possibility to prognosticate the most important parameters of the occurrence of placental dysfunction and certain complications of pregnancy in women of the main group. The correlation method enables to carry out deeper analysis of pathogenic relations existing between different processes during pregnancy in women with varicose veins and obtain new considerable data concerning the efficacy of the applied methods to prevent placental dysfunction.*

Key words: placental dysfunction, varicose, veins.

Introduction. To prognosticate placental dysfunction and certain complications of pregnancy in every individual case the correlation method of signs has been applied enabling to assess the degree of relations between certain clinical symptoms (by an appropriate parameter deviated from the norm) when certain pathology occurs. In case of closer correlation it will enable to prognosticate more substantially occurrence of obstetrical pathology in pregnant women with varicose veins. This method assumes calculation of sign correlation coefficient measuring a relative power of relations between two alternative parameters.

Objective: to apply the correlation method of sign with the purpose to prognosticate the development of placental dysfunction and certain complications of pregnancy in women with varicose veins.

Materials and methods. We have calculated coefficients of sign correlation concerning the possibility to prognosticate the most important parameters of the occurrence of placental dysfunction and certain complications of pregnancy in women of the main group.

Availability of correlations was determined with probability level of correlation coefficient $p \leq 0,05$. The form of connection was assessed according to the analysis of the coefficients of the linear and non-linear correlation and its errors. It should be noted that concerning all the examined

relations the largest evidence was obtained concerning their linear form, therefore, the value of Pearson linear correlation coefficient was applied as the value of connection strength. Determined correlation coefficients differed not only in their values but the sign as well, which is marked by means of the symbols «+» (directly proportional relation) and «-» (inversely proportional relation).

Before presenting the results of the study it should be noted that correlation coefficients between the pairs of parameters were determined in every group of the study separately using a certain principle of division into subgroups.

The main group (pregnant women with varicose veins) was divided into two subgroups: I subgroup – pregnant women with varicose veins in compensation stage ($n=26$), II subgroup – pregnant women with varicose veins in subcompensation stage ($n=24$).

Results. The data obtained are presented in Table 1. Deviation from the norm of every analyzed parameter enables to prognosticate with high accuracy development of placental dysfunction in pregnant women with varicose veins in the stage of compensation and subcompensation.

The parameters to prognosticate the danger of interruption of pregnancy are presented in Table 2.

Table 1

Sign correlation coefficients (SCC) and the value of “positive prognosticated assessment” (PPA) parameter concerning the development of placental dysfunction and the most important parameters of the fetal-placental complex indices in case of varicose veins.

Parameters	Main group (pregnant women with varicose veins in compensation stage) n=26	Main group (pregnant women with varicose veins in subcompensation stage) n=24
Above normal decrease of placental lactogen concentration in the blood serum of a pregnant woman	SCC = +0,751 PPA=0,833	SCC = +0,769 PPA =0,851
Above normal decrease of placental lactogen concentration in the trophoblast of the placental villi	SCC = +0,751 PPA =0,833	SCC = +0,769 PPA =0,851
Above normal decrease of estradiol concentration in the blood serum of a pregnant woman	SCC = +0,724 PPA =0,817	SCC = +0,721 PPA =0,809
Above normal decrease of progesterone concentration in the blood serum of a pregnant woman	SCC = +0,512 PPA =0,642	SCC = +0,509 PPA =0,615
Above normal increase of systolic-diastolic index in the uterine arteries	SCC = +0,751 PPA =0,833	SCC = +0,769 PPA =0,851
Above normal decrease of spiral arteries with complete gestational rebuilding	SCC = +0,751 PPA =0,833	SCC = +0,769 PPA =0,851
Immature chorial tree	SCC = +0,751 PPA =0,833	SCC = +0,769 PPA =0,851

Table 2

Sign correlation coefficients (SCC) and the value of “positive prognosticated assessment” (PPA) parameter concerning the danger of interruption of pregnancy and the most important indices of the fetal-placental complex parameters in women with varicose veins

Parameters	Main group (pregnant women with varicose veins in compensation stage) n=26	Main group (pregnant women with varicose veins in subcompensation stage) n=24
Above normal decrease of placental lactogen concentration in the blood serum of a pregnant woman	SCC= +0,512 PPA=0,642	SCC = +0,509 PPA =0,615
Above normal decrease of placental lactogen concentration in the trophoblast of the placental villi	SCC = +0,512 PPA =0,642	SCC = +0,509 PPA =0,615
Above normal decrease of estradiol concentration in the blood serum of a pregnant woman	SCC = +0,512 PPA =0,642	SCC = +0,509 PPA =0,615
Above normal decrease of progesterone concentration in the blood serum of a pregnant woman	SCC = +0,536 PPA =0,671	SCC = +0,539 PPA =0,686
Above normal increase of systolic-diastolic index in the uterine arteries	SCC = +0,751 PPA =0,833	SCC = +0,769 PPA =0,851
Above normal decrease of spiral arteries with complete gestational rebuilding	SCC = +0,751 PPA =0,833	SCC = +0,769 PPA =0,851
Immature chorial tree	SCC = +0,512 PPA =0,642	SCC = +0,509 PPA =0,615

It should be noted that the danger of interruption of pregnancy is the most prognosticated in case of deviation of systolic-diastolic index in the uterine arteries and decrease of the spiral arteries with complete gestational

rebuilding, and both these parameters are directly correlated.

The parameters to prognosticate a partial exfoliation of the chorion and placenta are presented in Table 3.

Table 3

Sign correlation coefficients (SCC) and the value of “positive prognosticated assessment” (PPA) parameter concerning a partial exfoliation of the chorion and placenta of the fetal-placental complex condition in women with varicose veins.

Parameters	Main group (pregnant women with varicose veins in compensation stage) n=26	Main group (pregnant women with varicose veins in subcompensation stage) n=24
Above normal decrease of placental lactogen concentration in the blood serum of a pregnant woman	SCC= +0,417 PPA=0,523	SCC = +0,406 PPA =0,509
Above normal decrease of placental lactogen concentration in the trophoblast of the placental villi	SCC = +0,417 PPA =0,523	SCC = +0,406 PPA =0,509
Above normal decrease of estradiol concentration in the blood serum of a pregnant woman	SCC = +0,417 PPA =0,523	SCC = +0,406 PPA =0,509
Above normal decrease of progesterone concentration in the blood serum of a pregnant woman	SCC = +0,417 PPA =0,523	SCC = +0,406 PPA =0,509
Above normal increase of systolic-diastolic index in the uterine arteries	SCC = +0,751 PPA =0,833	SCC = +0,769 PPA =0,851
Above normal decrease of spiral arteries with complete gestational rebuilding	SCC = +0,751 PPA =0,833	SCC = +0,769 PPA =0,851
Immature chorial tree	SCC = +0,417 PPA =0,523	SCC = +0,406 PPA =0,509

According to the data presented in Table 3 a partial exfoliation of the chorion and placenta is most reliably prognosticated in case of disorders of the fetal-placental circulation.

Discussion. The results of the studies presented and the analysis of prognostication of placental dysfunction, danger of interruption of pregnancy enabled to suggest that there are certain interrelations between the investigated processes characterizing different sides of the development of placental dysfunction in the main group of women. With the purpose to analyze possible pathogenic relations the correlation method was applied which enables to determine their availability, form and strength with determined degree of probability.

Conclusion. The correlation method enables to

carry out deeper analysis of pathogenic relations existing between different processes during pregnancy in women with varicose veins and obtain new considerable data concerning the efficacy of the applied methods to prevent placental dysfunction.

References:

1. Goshovska AV, Polova SP, Davidenko IS. *Prognozuvannya chastoti ginekologichnih zahvoryuvan. Uskladnen vagitnosti ta uskladnen u pologah za dopomogyu metoda dovirchih intervaliv vidotku. Materialy V Mezinarodni Vedecko-Prakticka konferece «Predni Vedecke Novinky; 2009 (Peredovyye nauchnyie razrabotki). Dil. 6; Praga, 2009. S. 3-5.*
2. Goshovska AV, Rak LM. *Prognozuvannya disfunktsiyi fetoplatsentarnogo kompleksu u*

vagitnih, hvorih na tuberkuloz. Naukoviy potentslal Ukrayini 2009. Materlali p'yatoyi vseukrayinskoyi naukovo-praktichnoyi konferentsiyi. Chastina 2; 2009 March 25-27;. S. 17-9.

3. Davidenko IS. Viktoristannya teoriyi informatsiyi dlya otsinki strukturnoyi organizatsiyi riznih tipiv horialnih vorsin platsenti pri fiziologichniy vagitnosti. Visnik morfologiyi. 2005;11(1):5-10

4. Filippov OS, Kazantseva AA. Prognosticheskaya znachimost razlichnyih metodov diagnostiki fetoplatsentarnoy nedostatochnosti. Problemyi reproduksii. 2003;(3): 60-3.

Chepka YuL. Prognozuvannya fetoplatsentarnoyi nedostatnosti na osnovi statistichnogo bagatofaktornogo komp'yuternogo anallzu. Ukrayinskiy medichniy chasopis. 2003;33(1):105-8.