

Contraceptive Methods and Prevalence of Adult and Young Women at Risk of Thrombosis in the Campos Centro Universitário do Distrito Federal-UDF

Métodos Contraceptivos e Prevalência de Mulheres Adultas e Jovens com risco de Trombose, no Campus Centro Universitário do Distrito Federal-UDF

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RESUMO

A Pílula anticoncepcional é um método muito confiável. Além de impedir a gravidez, os anticoncepcionais vêm apresentando benefícios em outras situações, da dismenorreia (cólica menstrual), da menorragia (excesso de menstruação) e da tensão pré-menstrual. Ultimamente ele vem causando muitos desafios a serem enfrentados, muitos relatos de mulheres que concluíram que adquiriu trombose pelo uso do anticoncepcional. Com estudos de casos realizados em capitais Brasileiras, feito com mulheres de 15 a 39 anos, mostram o quanto os problemas relacionados à trombose profunda em seios venosos, doenças cardiovasculares e hipertensão esta crescendo não apenas com uso dos anticoncepcionais, mas a maneira que ele é tomado, as mulheres relataram que tomam para evitar gravidez, com isso leva ao aumento dos riscos que devido ao seu uso prologando, a influência dos fatores genéticos que estão influenciando drasticamente para o aumento de casos. Conhecimentos epidemiológicos indicam que o uso desses medicamentos preestabelece maior risco de desenvolvimento de (TVP) trombose venosa profunda. Determina-se que o uso de contraceptivos orais aumenta a perspectiva de ocorrer TVP, pois os hormônios composto nesses medicamentos atuam no sistema cardiovascular.

Descritores: Contraceptivos Oraís; Riscos de Trombose; Doenças Cardiovasculares; Hipertensão.

ABSTRACT

The contraceptive pill is a very reliable method. In addition to preventing pregnancy, contraceptives have shown benefits in other situations, such as dysmenorrhea (menstrual cramps), menorragia (excessive menstruation), and premenstrual tension. Lately it has been causing many challenges to face, many reports from women who have concluded that they have acquired thrombosis through the use of contraception. With case studies conducted in Brazilian capitals, performed with women aged 15 to 39, show how problems related to deep thrombosis in venous sinuses, cardiovascular diseases and hypertension are growing not only with contraceptive use, but the way it is taken, women reported taking it to avoid pregnancy, with this leads to increased risks that due to their prolonged use, the influence of genetic factors that are drastically influencing the increase in cases. Epidemiological knowledge indicates that the use of these drugs pre-establishes a higher risk of developing deep venous thrombosis (DVT). It is determined that the use of oral contraceptives increases the prospect of DVT, since the hormones composed in these drugs act in the cardiovascular system.

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Descriptors: Oral contraceptives; Risks of thrombosis; Cardiovascular diseases and hypertension.

Introduction

In Brazil, the use of contraceptives has increased notably since 2006. Nowadays, about 80% of women in reproductive age use some kind of reversible method. On other hand, the number of patients who decide for surgical procedures has severely decreased.¹⁻²

The contraceptive methods are classified in reversible (behavioral, barrier methods, intrauterine devices, hormonal and urgency options) and definitive (lacquering of the fallopian tubes and vasectomy, that are surgical procedures, called irreversible means).³

Venous thromboembolism (VTE) is the term applied to describe the combination of two diseases, the deep vein thrombosis (DVT) and the lung emboly(LE). The deep vein thrombosis is an illness caused for coagulum formation into the deep veins, generally in lower limbs, in the superficial or deep nervous systems causing total or partial obliteration of the vein. Thrombus are formed spontaneously or as result of parietal injury, chock or inflammation.⁴

Thromboses is consequence of three types of changes ("Virchow's triad") that work isolate or simultaneously: Changes in vascular or heart walls; hemodynamic or rheological changes; modifications in blood composition with hypercoagulability.¹

The occurrence in adults is higher in the third decade of life. Aggression against young women is an important fact that may be related to the use of oral contraceptives- the main associated risk factor. Consumption of oral contraceptives, well as the mutation of prothrombin gene (G20210A) are the risk factors relevant for DVT and need to investigated more often.⁵

Several epidemiological knowledges demonstrate an association between the use of combined oral contraceptives (COC) and the higher risk for venous and arterial thrombosis. The combination of one estrogen (generally, ethinylestradiol) and one isolated progestogen (without the estrogenic element) act by blocking the ovulation by inhibiting the secretion of follicular stimulating and luteinizing hormones; compact the cervical mucus blocking the passage of spermatozoids; become the endometrium non- receptive to the holding and change the secretion and peristalsis into the Fallopian tubes.⁵

The aim of sexual hormones on the cardiovascular system has been theme of several scientific debates once the blood vessels are the target of these hormones because there are estrogen and progestogen receptors in all layers that compose the blood vessels.¹

All oral contraceptives, equally to other methods that release hormones, have as one of these side effects a higher chance for DVT as consequence of the hormones present in this medicines, such as estrogen and progesterone, that affect the blood circulation. The risk of DVT when associated to the oral contraceptive use is proportional to the levels of estrogen. The actual contraceptive pills expose the estrogen levels less than the old ones.²

Into the brain, there is a gland called hypophyses, that produces the follicular stimulating hormone (FSH) and luteinizing hormone (LH), that stimulate the production of estrogen and progesterone into the tubes.

The FSH and LH increase and decrease their levels during the month and when get the highest level in the body, induce the production of estrogen and progesterone leading to the ovulation.²

The basic objective of hormonal contraceptives is the result of females non-ovulatory reproductive cycles, i.e., ends by uterine bleeding without ovulation. The aim is achieved through the estrogen, with or without progesterone, existing in the hormonal contraceptives that influence on hypothalamus and hypophysis what lead to the inhibition of the GnRH secretion, consequently, of the FSH and LH, indispensable for the ovulation.²

Several are the advantages resulting from hormonal contraceptives, for patients who do not intend the pregnancy, such as the suppressions of the LH secretion for the hypophysis causing the reducing of ovarian production of androgens LH dependents; decreasing the secretion of adrenals androgens; increasing of liver production of holding globulin of sexual steroids- SHBG, reducing the levels of free androgens and the risk of endometrial carcinoma. For selecting the contraceptive, is essential to consider the type of progestogen included in the combination estroprogestative, aiming the capacity of blocking the ovulation and causing secretive transformation in endometrium, without, however, showing androgenic activity.⁶

Guided for British researchers, the new study shows that the women who intake combined oral contraceptives (containing drospirenone, desogestrel, gestodene and desogestrel); 3rd generation contraceptives (gestodene- Gynera, Tri-Gynera, Harmonet, Microgeste, Minigeste, Minulet, Tri-Minulet, Minesse, etc); and 4th generation contraceptives (Ciproterona - Diane 35) have four times more risk for venous thrombosis than those who do not take the pill.⁷ This risk is four times higher (1,5 to 1,8 times higher) compared with those who take older oral contraceptives, that contain levonorgestrel, norethisterona or norgestimata, such as the Microvilar, Ciclo 21 and Level. It has androgenic action, i.e., seemed to male hormones. It may cause skin oiliness, acne and increase of hair. On other hand, it may be a good option for those women who claim of the fall of libido when using the pills.⁷

There is a study published in the scientific journal Expert Opinion (September 2008) that described that the risk of endometrium and ovarian cancer decreases due to the ovulations that are "corrected" for the pills' use. There are evidences that contraceptive pills favors myomas and uterine cists treatments. According to the gynecologist Jorge Haddad, chief of Urogynecology Sector of the Hospital das Clinicas da Faculdade de Medicina da Universidade de São Paulo (FMUSP), the protection against ovarian cancer occurred due to the fact that contraceptive interrupt the ovarian function.² In Brazil, the Health Ministry sponsor and buy the contraceptives and supplies in the context of Women's Health Program.⁸

The medicines offered in public health services and in Brazilian Program of Popular Pharmacy (PEPB) and that are listed in the National List of Essential Drug (PFPB) are: medroxy progesterone acetate; norethisterone enanthate + estradiol valerate; ethinylestradiol + levonorgestrel 0.03 mg + 0.15 mg; and

norethisterone 0.35 mg. Public health services also provide emergency contraceptives: levonorgestrel 0.75 mg and misoprostol 0.025 mg and 0.2 mg. This project intends to reach and analyze the prevalence of current use of oral and injectable contraceptives by students or non-students of UDF, according to demographic variables, and aspects related to access to these drugs.⁷

Many cases of women using inappropriately contraceptives have been observed. Oral contraceptives are the most widely used and reliable methods that exist, the condom many of them have no habit to use, relying only as a means of preventing sexually transmitted diseases, the contraceptives they use to prevent pregnancy, this is reflected not only in relation to the family planning, as well as in the risks they offers when used for many years.⁹

According to research b the Brazilian Confederation of Gynecology Associations held in 2014, about 100 million women use pills worldwide. Currently, in Brazil, around 27% of women use the contraceptive method.⁶ Today, with contraceptive use increasing, women are in the most fragile health, besides obtaining the benefits it brings harm, every day there are growing cases of women who have acquired thrombosis, cardiovascular diseases and hypertension.² Over the years, it has been observed that oral and injectable contraceptives when used improperly, without medical consultation and correct guidelines, have been causing not only thrombosis but also hypertension and cardiovascular diseases, justifying the present search.¹

A main objective of this study was to assess the self-reported risks of thromboses caused for oral and injectable contraceptives. The hypertension and cardiovascular diseases, trough the long-term use, with medical consultation and adequate guidance were also evaluated.

Method

The is a cross-sectional, analytical and epidemiologic study of population basis. We used primary data based on the papers' selection, done according with the proposed theme and the databases assessed were: SciELO (Scientific Electronic Library Online) and Health Ministry' documents and papers. We have assessed the information available, using explicit and systematic searching methods and summarizing the selected evidences from literature. The prevalence results were calculated from the reports of women aged 18 to 40 years, non-pregnant, about the use of oral contraceptives trough a questionnaire in the Centro Universitário do Distrito Federal (UDF) during three and four weeks. The study was conducted with 100 male students after signing the Free and Informed Consent Term(FICT).¹⁰

Results

The prevalence based on the data gathered from students in the Centro Universitário do Distrito Federal – UDF resulted in a quantitative of 84 women who are users of oral contraceptives, among them 16% reported to be experiencing thrombosis. The prevalence data on thrombosis cases were higher in women aged between 18 and 25 years. According Table 1, the findings

obtained on thrombosis cases point a quantitative of 84% women who use contraceptives.

16% DAS MULHERES JÁ TIVERAM CASO NA FAMÍLIA			
18 – 25	25 - 30	30 - 35	35 - 40
5 %	4%	4%	3%
PERÍODO EM USO			
22%	5%	13%	5%

TABELA 1 O resultado obtido referente ao percentual de casos de trombose.

Changes has deeply affected the behavior of many young persons who, nowadays, begin their sexual activity earlier, mostly about 15 years old, where there is more convivence in school setting and non- appropriated spaces. Since then, this age is when most women use oral contraceptives.⁷

An investigation showed that many women use the incorrect oral contraceptives based on researches and studies conducted.¹¹ Data from this investigation demonstrated that there is a high index of women using oral contraceptives with self-medication, summing the percentual of 20% from 84% that use the method.

The hormonal female contraceptive is celebrated as one of the marks of women's independence and participation. It's too one of the most issues to the females' physical and mental health in the last decades¹².

According Table 2, the prevalence of contraceptive use, with self-medication, for women is 20% of total.

PRESCRIÇÃO			TEM EFEITOS COLATERAIS		
MÉDICO	AUT.MD	N.	SIM.	NÃO	N.
66%	20%	3%	33%	53%	16%

TABELA 2 A prevalência de utilização de contraceptivos, com automedicação.

FAZ USO COMO CONTRACEPTIVO			
SIM	NÃO	N.R	
45%	47%	8%	
QUAL FRÊQUENCIA VAI AO MÉDICO			
1 ANO	2 ANOS	3 ANOS	NUNCA
59%	21%	13%	7%

TABELA 3 Período de uso com a frequência que realiza consulta médica.

CASOS DE TROMBOSE POR ANTICONCEPCIONAL NA FAMÍLIA		
SIM	NÃO	N.R
16	75	09
TOMA NO MESMO HORARIO TODOS OS DIAS		
SIM	NÃO	N.R
49	38	13

TABELA 4 Relação de casos encontrados, com os horários que toma o anticoncepcional.

IDADES	V.A
18 – 25	47
25 – 30	21
30 – 35	23
35 - 40	09

TABELA 5 Idades que participaram da pesquisa.

Discussion

In this research, we found an evident use of oral contraceptive for women between 18 and 40 years old, sexually active or not. The predominance of OC was of 84% and the most part of females reported using contraceptives for medical recommendation.

The prevalence of contraceptives use among those with medical recommendation was higher (66%). Users who get the method with self-medication totalize 20%.

The total predominance of OC use was of 84%, the use by age range was higher in those between 18 and 40 years old and we found that 45% use them as contraceptive and 47% do not use them as contraceptive. Among those, 59% take medical consultation once a year. The profile of women who use OC for more than 5 years is of 43%. According the research, 43% of women take OC for more than 5 years, but not every day in the same time (38%).

The undesired side effects from long-term use of hormonal contraceptives is the increased several risks for health, such as the risk for venous thrombosis that is twice or three times higher, but this risk decreases with the use duration and the estrogen doses is reduced.⁴

The habits contribute significantly for increasing the risk of thrombosis. Cigarettes, poor nutrition, lack of physical exercises and obesity increases twice or three times the risks for brain hemorrhage and myocardial infarction. These risks decrease after the cessation of use. The chances for ovarian or endometrial carcinomas are linked to breast or cervical cancers of about time regarding these keep during several years.¹⁴

Conclusion

The oral contraceptive is the most use method for family planning among women from 18 to 40 years. Through this study was attested that Thrombosis is considered a gravis diagnostic and that affect more than 80% of people.

We conclude that 16% of women reported cases of thrombosis for oral contraceptive use in family. With the increase in the last years, an estimative that is not considered low, but increases the risk of developing cardiovascular diseases, affecting the women's physical and mental health.

In the actual moment, the use of conceptional became very often in female samples, something that has grown each more, and may be verified that many use them as a way to prevent pregnancy, making the main risk factor increases, related to the inadequate use, that starts about 15 years, to avoid pregnancy and treating diseases of polycystic ovarian.

Trough the field research carried out in UDF, only aiming correlation and study, we observed that the age with more cases of thrombosis in family regarding the contraceptive use was 18 to 25 years old, for long-term use. Therefore, trough the study that was done at Centro Universitário do Distrito Federal-UDF, we concluded that 16% of females already had a case of thromboses in family, regarding the use of contraceptives was of great relevance for the investigation. We considered hereditary cases and lifestyle when the oral contraceptive is used.

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