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### FIBROIDS IN WOMEN RELATED TO HORMONAL CONTRACEPTIVE USE

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ABSTRACT: The present prabajo performs an electronic search of the existing information on the enhancement between the fibromas in breast and the relationship with the use of contraceptives A review was made in the meta-search engines academic google, redalyc, scielo and search engines like punmed, cuban magazine of nursing in the range of 2015 to 2021 where the key words were, "fibromas", "breast" and "contraceptives". Clinical studies with the greatest available evidence were selected, focusing on randomized studies, systematic reviews, and meta-analyzes. 905 studies were located, but 858 were excluded that were not relevant to the objective of the review, of which only 25 were selected that were directly related to the subject. Therefore, the use of contraceptives tends to be risk factors for fibroadenoma was observed in the meta-analysis, and it was analyzed that the use of hormonal contraceptives may influence the complexity of the injury as opposed to those not used. it should be mentioned that other factors such as age and time of use may be involved.

**KEY WORDS:** Breast cancer, fibroids and antoconceptions

### INTRODUCTION

Breast cancer is an international public health problem, in the Americas OPS (2021) reports a diagnosis of 462,000 women with breast cancer annually, and 100,000 die from the disease. Early diagnosis is the best tool to prevent the progression of the disease and can be treated properly, however in Latin America and the Caribbean continue to have a major problem in self-care processes (OPS, 2020). Self-care includes all the actions and decisions a person makes for the purpose of preventing, diagnosing, and treating his or her disease. Includes all individual activities aimed at maintaining and improving health, including physical activity, abandoning harmful habits, eating healthy, monitoring blood pressure, body weight and blood glucose, perform timely screening tests such as breast self-examination and, in case of chronic degenerative diseases, seek medical attention for control (Bustamante, 2015).

The types of breast tissue are classified according to the composition of the glands: Fibroglandular breast; they are mostly made up of fibrous tissue and glandular tissue; this type of breast is present in young women about 15 - 30 years old. Fibroadipose breast composed of fibrous and adipose tissue, most of which is present in adult women aged

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approximately 30 - 50 years and finally the adipose breast made up of 75% of adipose tissue presented by women >50 years whose characteristic is flaccid and fallen. (Huayta, 2018).

Fibroepithelial lesions of the breast are classified into two main clinical pathological groups Classic fibroadenomas and phyllodes (TP) tumors (Sarqui, 2013) are benign tumors of the breast which are composed of glandular tissue and stromal tissue or also called connective tissue (American Cancer Society, 2015). According to the Spanish Royal Academy 2020 fibroma is a small-size, spheroidal shape concretion, constituted by the accumulation of lymphocytes mainly in the connective tissue of the mucous membranes (Spanish Royal Academy 2020), the most frequent benign breast tumor is fibroadenoma, another less common mass is breast cyst, breast fibroadenoma is seen very frequently in a population between 20 and 40 years of age; it may appear during pregnancy. Fibroadenoma can be found at PE (physical examination) as a tumor of varying size between 2 and 5cm, spherical or discreetly elongated, lobulated, of hard or elastic consistency, well-defined limits, slightly painful. (Secretary of Health 2009), accounts for about 90% of solid breast lesions in adolescence. Clinically present as palpable, elastic, and mobile lesions, often located in the upper external quadrant of the breast, and their usual size can be between 1 and 3 cm. (Menéndez, 2014). Fibroids are one of the diseases that if detected in time the mortality rate tends to zero so health professionals must provide the right tools for self-care; however, these processes are not carried out (Bustamante, 2015).

The descriptive language that should be used to report these studies is the so-called BI-RADS (Brest Image Rporting And Data System) regulated by the American College of Radiology. It allows us to know what type of injury it is, what risk it has and what behavior is the most appropriate for its management (Sciuto, 2018). This mammographic method analyzes the mass findings that make up each of the BIRDS table 1 categories, as well as categorize the lesions, establishing the degree of suspicion prognostic implications and the most frequent management of each. Considering their risk factors for different degrees of association for benign breast diseases such as oral contraceptive use, early presence of her first menstrual period, nulliparity, breastfeeding, menopause, socioeconomic status, education, race, and family history of breast pathology; therefore, it is important to perform a correlational analysis of the studies carried out according to the relationship between fibroids and the use of hormonal contraceptives in women.

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Category	Evaluation			
BI-RADS 0	Mastography: Incomplete. Additional image evaluation required and/or previous mastographs for comparison Ultrasound and MRI: Incomplete. Additional image evaluation required.			
BI-RADS 1	Negative. No injuries found			
BI-RADS 2	Benign (benign findings exist) Follow-up at normal interval is recommended.			
BI-RADS 3	Findings with a probability of malignancy.			
BI-RADS 4	It includes those lesions that wide range of probability of subcategories  4A: Low  4B: Moderate  4C: High suspicion of mali	Fmalignancy (2-95%) is suspicion suspicion	_	•
BI-RADS 5	Highly suggestive of malignanc			
BI-RADS 6	Malignant diagnosis verified by biopsy			

Table 1. Description of breast alterations according to the classification of BI-RADS (Jaramillo, 2020)

### **METHODOLOGY**

The present work is a metanalysis of the relationship that exists of hormonal contraceptives with fibroids in the breast; a review was carried out in the meta search engines google academic, redalyc, scielo and search engines such as pubmed, Cuban journal of nursing in an interval from 2015 to 2021 where the key words were, "fibroids", "breast" and "contraceptives".

Clinical studies with the greatest available evidence were selected, focusing on randomized studies, systematic reviews, and meta-analyzes. 905 studies were located, but 858 studies were excluded that were not relevant to the objective of the review, of which only 25 were selected that were directly related to the subject.

The following criteria were taken into account:

Inclusion: Spanish, English and Portuguese languages, which have been published from 2015 to 2021. Also consulted were the theses of scientific degree, master's degree and specialties in the country, related to the subject

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### **RESULTS**

905 studies were located, but 858 studies were excluded that were not relevant to the objective of the review, of which only 25 studies were selected that were directly related to the topic. They usually occur in women between 13 or 14 years of age until 30, although in some cases they may occur at older ages, and they may be shown calcifica—two during screening mammograms (Gallego 2005).

Oral contraceptives are generally safe for breast diseases, except in breast cancer patients or high-risk women, especially those with a history of chest wall irradiation (Alipour 2019). The relationship of contraceptive use and the frequency of breast pathologies, is given 20-25 years for 4-5 years, increases the risk before the age of 45 and this disappears after 10 years of stopping taking them, in patients it was observed that 49% used oral contraceptives (Muñoz 2017). The association with oral contraceptive use and breast fibroma was found to be more frequent in those patients who used contraceptives throughout their sexual and reproductive life by 71.2% (Ocaña 2016)

The study of the incidence of breast fibroadenoma and its risk factors in women between 20 and 40 years of the outpatient gynecology clinic at Hospital Alfredo Noboa Montenegro, we found that among patients with a history of hormonal contraceptive use, there was a lower number of complex and multiple fibroadenomas, whereas in patients with no history of hormonal contraceptive use, there was no significant variation between complexity and number of lesions the two variables of injury number and complexity were presented in equal proportion (Martinez 2018).

In the study of titling a solitary breast node: Clinical diagnosis in women between 15 and 65 years, 155 cases of women between 15 and 65 years who presented a solitary breast node during the period 2015 were studied with the aim of establishing the main diagnoses. incidence according to age, body mass index, accompanying symptoms, number of gestas, contraceptive use and family history. According to the risk factor indicators studied with regard to contraceptive use, 78% contraceptive use was oral, 33% injectable, 20 13% other, and 12% intradermal, it is observed that contraceptive use with this 78 per cent is considered a high risk factor (Ganchozo 2016).

Oral contraceptives may be beneficial for benign breast diseases. For low-risk women, pills pose no risk or may induce a very slight risk of breast cancer. According to the benefits of combined oral contraceptives, there is evidence that combined oral contraceptives reduce the risk of breast fibroadenoma (Vásquez 2020). Exposure to exogenous hormones (contraceptives) slightly increases the risk of breast cancer. The use of hormone therapy after menopause increases the risk of developing dose- and time-dependent breast cancer (Bayesian Predictive System for Breast Cancer Detection)

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In a large cohort study of 265,402 women, different risk factors were evaluated for fibroadenomas: Increased ACO use time was associated with a decreased risk of fibroadenomas (Menéndez, 2014). Based on data found, and statistics of breast pathology in ages that coincide with hormonal changes throughout the life and reproductive cycles of the woman are said to contribute to the differentiation of the structures and cellularity of the breast thus the risk of developing some benign disease breast is commonly associated with menopausal and hormonal status. (Ganchozo 2016).

In their work, Susan Love and Hutter do not consider the fibrocystic condition to be a true disease but a characteristic common to a large percentage of women. Other authors doubt this conceptualization¬and suggest that morphological changes should be associated with biochemical, hormonal, and genetic markers that determine the eventual development of a cancer (Gallego 2005). There is a decrease in the incidence of benign breast disease with the use of oral contraceptives.( Bucheli 2021).

### **DISCUSSION**

Using the results obtained, it was found that there is an association between the use of contraceptives with breast fibroids, as expressed by Ocaña (2016) "risk factors and complications of breast fibroadenoma in women aged 25 to 60 years", It is important to note that in Mexico 70% of fertile women use some form of contraception and 87% of this is a hormonal method, but 78.4% have used emergency contraception (economist 2021) so it is important to establish for periods of time (consistently) the application of hormones that together with the lifestyle opts fibroids and nodules in the breast; however, the article on the benefits of combined oral contraceptives found the opposite according to Vázquez (2020) where it states that there is evidence to show that combined oral contraceptives decrease the risk of breast fibroadenoma, it is important to note that these have only little time on the market.

Risk factors for the appearance of a breast fibroma in which there is a higher incidence of appearance in women who have used some hormonal contraceptive method, in the titling work of solitary breast node: clinical diagnosis in women between 15 and 65 years of age, contraceptive use was considered a risk factor of 78%. It is important to consider that the emergency or day after pill has a high level of levonorgestrel which in a single application causes as adverse reactions the alteration of the hormone cycle, causing hemorrhage, uterine pain, dizziness headache, vomiting, increased breast sensitivity, tiredness (vademecum 2021). Infosaluds (2017) reports that 70% of breast cancers are homodependent It is important that women with long periods of time have periodic reviews for the timely detection of fibroids or nodules, this may be by means of self-examination, or methods such as ultrasonography and mastography.

The time in which hormonal contraceptives were used influences the appearance of fibroadenomas, in Bayesian predictive system for the detection of Breast Cancer mentions

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that there may be an increase in development but depending on the dose and time, Unlike "unusual evolution of multiple breast fibroadenomas in adolescents with dysfunctional metrorrhagia" Mendez (2021) said that the longer hormonal contraceptive use decreases the risk of fibroadenomas. It is important to establish that in adolescence there is instability in the hormonal system, since it does not yet reach sexual maturity, so when administering the contraceptive hormones they can stabilize that hormonal balance. According to the non-contraceptive benefits of hormonal contraception, it refers that with hormonal contraceptives containing less than 50 mcg of ethinylestradiol has a protective effect with fibroadenomas using it in the long term in the same way, the progression of the disease is lower in users who use hormonal contraceptives.

## **CONCLUSION**

According to the articles analyzed, it was concluded that if there is a relationship with hormonal contraceptive methods and the occurrence of fibroadenomas in women since most women had a history of using these methods in the studies. Therefore, it was observed that all contraceptives tend to be risk factors for fibroadenoma, but those with the highest incidence were hormonal contraceptives. it was analyzed that the use of hormonal contraceptives may influence the complexity of the injury unlike those not used, it should be mentioned that other factors such as age and time of use may be involved.

It is important to note that women according to their age have hormonal changes which are factors to initiate with a breast fibroadenoma, of which they were most observed in adolescents and in the menopause stage. Therefore it is very important to carry out some diagnostic method for the detection of some palpable mass. It is of the utmost importance to note that when talking about hormonal contraceptive methods, not only is there talk about the contraceptive effect that you are going to perform if you should not give priority to the side effects that these hormonal treatments can have.

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