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Clinical examination in gynecology consult X laboratory findings: evidence of the main infections of the reproductive tract

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Abstract. Sexually transmitted infections (STIs) are among the most common public health problems worldwide. The study aimed to identify gynecological infectious etiology, based on the clinical complaint of the patient and later compare with the results released by the clinical laboratory, clinically analyzing external gynecological changes and clinical complaints of patients seen in primary care. This is a documentary, descriptive, and quantitative research, conducted in a primary care unit of the Sinop municipality in 2015. Women assisted by the Extension Project Team "Nursing care: A health promotion tool sexual and reproductive" participated in this work. The clinical examination data were collected in gynecological care and preventive examinations and recorded in a structured form. The number of preventive examinations in 2015 was 100 samples. The age of the women participating in the survey that stood out was 20 to 29 years old. Analyzing aspects of the cervix of patients who performed the Pap smear: 82 (82%) were complete, 5 (5%) showed some change, 6 (6%) were friable, 5 (5%) were not displayed having been surgically removed and 2 (2%) were not displayed. According to this survey, of the 20 amendments in the laboratory results, 14 (70%) examinations portrayed resemblance to the clinical description of the gynecological examination. The infectious agent of higher prevalence compared with the clinical description of abundant leucorrhea was Gardinerella vaginalis represented in 09 reports of cervical cytology. There was 68 (68%) negative Schiller test and 8 (8%) positive Schiller test and 24 (24%) women, unfortunately, did not perform the test for lack of material during collection at the unit. It is concluded that investment in health education is necessary, with groups that address women's health, emphasizing the importance of prevention as well as the return of the woman to take the laboratory results and/or post-therapeutic assessment; promoting the realization of more joint efforts for preventive collection for more flexible hours to give opportunity to the patient who has dual working day and offer minimum conditions for carrying out the Papanicolaou and Schiller test.
Keywords: Gynecological Examination, Sexual Health, Sexually Transmitted Diseases.

Introduction

According to WHO estimates (2013), more than a million people acquire an STI daily. Each year, an estimated of 500 million people acquire a curable STIs (gonorrhea, chlamydia, and trichomoniasis síflis) (BRASIL, 2015).

STIs are among the most common public health problems worldwide. Among its consequences, there are the female and male infertility, infection transmission from mother to child, causing miscarriages or birth defects and increased risk of HIV infection (BELDA, 2009).

Among women with untreated infections with gonorrhea and/or chlamydia, 10 to 40% develop pelvic inflammatory disease (PID). Of them, over 25% become infertile. Reports from developed countries indicate that women who have had PID are likely 6 to 10 times greater having a risk of developing an ectopic pregnancy. Miscarriages, stillbirth, low birth weight, congenital and perinatal infections are associated with untreated STIs in pregnant women. Among men, chlamydia also causes infertility and sterility (BELDA, 2009).

Women often asymptomatic, are not monitored or guided on their gynecological care. Finally, the services that meet STIs tend to be specialized clinics, which stigmatizes the population demanding them. Therefore, a single consultation should provide diagnosis, treatment and counseling, and access to prevention, when needed (BRASIL, 2006b). The clinical diagnosis may be incorrect while laboratory confirmation is expensive and not always possible. The delay in diagnosis can lead the patient to not return to treatment, allowing him disseminating the disease (NADAL; CARVALHO, 2004).

In Brazil, since 1993, the National Program for Control of STI/AIDS recommends the syndromic

approach to the treatment of patients with some STIs (NADAL; CARVALHO, 2004).

This type of approach has been suggested in the second half of the 70s by researchers and public health physicians working in Africa, where there were large numbers of affected people by STIs and extreme poverty. The idea was developed for specific local conditions and available resources. Subsequently, the WHO promoted globally in the form of algorithms. The acceptance occurred by the rapid spread of HIV/AIDS and the apparent effectiveness of the method (NADAL; CARVALHO, 2004).

Studies have shown that the syndromic approach in the long term has a better cost-benefit ratio, that is complications from treatment, can result in high costs to the health system. Thus, the syndromic approach would work as a preventive action relative of low cost (MOHERDAUI, 2000).

Knowing the main anatomical and functional aspects, both male body as the female, the health professional may associate the data of history and make a diagnosis of the presumption of main syndromes (syndromic approach) (BRASIL, 2006a).

The syndromic approach advocated by the Sexually Transmitted Diseases Control Manual 2006 showed good sensitivity and specificity in the urethral and vaginal discharge (referring to vaginitis) and pelvic inflammatory disease (PID), but its flow chart was not useful for management of cervicitis, because the risk assessment promoted high and unacceptable treatment rates and low positive predictive values. Also, the management of genital ulcers needs particular attention in the construction of recommendations for the flowchart, due to different possible etiologies. Considering the performance of the syndromic approach without using support laboratory did not have full coverage in the different aspects of STI, and that combination prevention is a strategic approach aligned to national and international guidelines, which involves various forms of prevention and care, proposing then the comprehensive management of STIs, combining, when available, monitoring and treatment of asymptomatic STIs and the use of flowcharts in STI symptomatic using complementary laboratory (BRASIL, 2015).

The increase of STIs in Brazil is alarming, both curable and non-curable. To minimize this number, the Ministry of Health offer to women the opportunity to perform the oncotic Pap test (CCO), also known as a preventive for free in all family health strategies to ensure health promotion.

The examination of the Pap test prevents the development of cervical cancer and also identifies some STIs through the signs and symptoms or main complaint of the patient at the time of pelvic examination, and the results of the laboratory report. The management of infections aims to reduce the waiting treatment for various STIs, especially those related to vaginal discharge and genital ulcers. The service is fast, and it locks the chain of epidemiological transmission.

This study aims to identify gynecological infectious etiology based on the clinical complaint of the patient and subsequently clinically to analyze the gynecologic changes compare to the results released by the clinical laboratory.

Methods

This is a descriptive research that requires the researcher a lot of information about what he wants to search. According to Triviños (1987), this type of study is intended to describe the facts and given the reality of phenomena, with a quantitative approach where the results are taken as if they were a real picture of the entire target population of the survey (UFRGS, 2009).

Data were obtained from the collection of preventive and gynecological clinical examination in women of a Primary Care Unit (UAB) in the municipality of Sinop - Mato Grosso, described in a form. The study was conducted at UAB Botanical Garden neighborhood, located in Sinop-MT, where since 2014, the researcher exercises his extension project activities" Nursing care: a promotion tool to sexual and reproductive health",

The patients were asked to return the unit to an average of 30 to 40 days to take the test results, and this is delivered to the front desk and the client is referred to responsible health unit nurse, so that explains the findings clinical and record the data from the laboratory result in the record book of cervical cytology test results and medical records of the patient. Thus, it was possible to collect data from the laboratory of preventive results to compare with the gynecological clinical examination.

All women without distinction of age, volunteers who agreed to participate; women who had already begun their sexual life, if she was a minor since she was accompanied by a responsible were included in the study. Voluntary women who agreed to participate; minors without a responsible person; virgins; pregnant women at any stage of pregnancy were excluded.

Data collection occurred in 2015. The sample consisted of all women who underwent preventive cervical cancer and who met the inclusion of this research.

It was requested that the women sign a consent form Clarified (TCLE). Soon after a way of the term for voluntary was given, with information about the research and data from the researcher, if they needed to contact her.

The study was approved by the Ethics Committee of the Hospital Júlio Müller (HUJM), the Federal University of Mato Grosso (UFMT), under number 1207566, and complied with all the ethical principles of research involving human beings described in Resolution 466/12 of the National Health Council/Ministry of Health (BRASIL, 2012).

Data were analyzed using descriptive statistics, part of statistics responsible for the

organization, summary, and presentation of data using absolute and relative frequency (FERREIRA, 2005). And they were presented in tables.

Results and discussion

The number of preventive examinations in 2015 was 100 samples. Women who participated in the survey were presented, with the age group of 20 to 29 years old and 30 to 39 years old with a value of 26 (26%) and 22 (22%), respectively, followed by 50-59 (19%) , 40 to 49 (18%),> 60 years (8%) and <20 (7%).

Table 1- Age group of patients who performed the Pap smear, Sinop-MT, 2015.

Age group	N	%
<20 years old	07	07
20 – 29 years old	26	26
30 – 39 years old	22	22
40 – 49 years old	18	18
50 – 59 years old	19	19
>60 years old	08	08
Total	**100**	**100**

source: Research data

Bringel et al., (2012) state that women aged 25 to 34 years old have to be more constant in the coverage of Pap tests.

The youngest patient to perform the preventing test was 15 years old, the average age of women to perform the Pap smear was 40 years old and the oldest at the time of collecting age was 74 years old.

According to Leitão et al, (2008) in their studies (44.4%) the patients were older than 30 years old; 52 (26.8%) were between 20 and 25 years old; 28 (14.4%) between 16 and 19 years old; 24 (12.4%) between 26 and 30 years old and 4 (2.0%) were between 10 and 15 years old.

According to Bringel et al., (2012), women older than 55 years old were the least likely underwent Pap smear. Also, women aged 60 or more were more likely to develop cervical cancer.

The Consensus Meeting held in 1988 by the Ministry of Health had the participation of many international and national experts, representatives of scientific societies and various ministerial bodies. This event established that, in Brazil, the Pap smear should be prioritized for women 25-60 years old, once a year, after two consecutive negative annual examinations every three years (BRASIL, 2006c).

During the collection of the preventive exam, the clinical examination showed that 82 (82%) displayed uterine cervix complete, 5 (5%) showed some change (ectopia, polyp), 6 (6%) were friable, comparing to the research conducted by Filho et al., (2013), 22 women (7.0%) had friable cervix, 8 (2.5%) had severe ectopic and 23 (7.3%) discrete ectopia. 5 (5%) did not have the collars viewed by surgical removal (total or partial hysterectomy), and 2 (2%) the cervix were not displayed, as shown in Table 2.

Table 2- Aspects of the cervix of patients who performed the Pap smear, Sinop-MT, 2015.

Aspects	N	%
Complete	82	82
Changed	05	05
Friable	06	06
Hysterectomized	05	05
Not displayed	02	02
Total	**100**	**100**

Source: Research data

According to the descriptions made of the 100 women who participated in the survey, 4 (4%) women had discharge with yellowish, 26 (26%) with whitish, 3 (3%) were purulent, and 66 discharge (66%) did not show any discharge at the time of genital inspection.

Table 3- Characteristics of discharge of patients who performed the Pap smear, Sinop-MT, 2015.

Characteristic	N	%
Yellowish	04	4
Whitish	26	26
Purulent	04	4
Without discharge	66	66
Total	**100**	**100**

Source: Research data

Itching and discharge have been the most common clinical manifestations observed in yeast vaginitis (Boatto, 2007). Boatto et al., (2007) reported that white discharge or yellowish-white (100%) and pruritus (97.5%) were the most frequent complaints among women investigated. While Leitão et al., (2008) found leucorrhea in 35.2% of women surveyed.

Boatto et al., (2007) reported pruritus, leucorrhea, whitish plaques, edema and erythema of the vulva and the vagina as the most common clinical manifestations in this type of infection.

According to Bravo et al., (2010) although almost 1/3 of infection by T. vaginalis is asymptomatic, most develop complaints such as vaginal discharge (clear or purulent), vulvar irritation and inflammation. It is noticed that the clinical examination can be assumed the infectious agent through the feature of vaginal discharge.

The cytological results reported by the laboratory, according to infectious agents were: Gardnerella vaginalis present in 14 (70%) examinations, Candida sp in 5 (25%), Trichomonas vaginalis in 1 (5%), corroborating Leitão et al., (2008) infections that stood out were: Gardnerella vaginalis (28.3%), Candida sp. (7.7%) and Trichomonas vaginalis (0.5%).

Table 4: Main genital infectious agents described in laboratory tests of patients who performed the Pap smear, Sinop-MT, 2015.

Infectious agents	N	%
Gardnerella vaginalis	14	70
Candida sp	05	25
Trichomonas vaginalis	01	05
Total	**20**	**100**

Source: Research data

Becker et al., (2011) also found similar proportions; G. vaginalis was the most prevalent (15.6%) followed by Candida sp. (2.3%) and T. vaginalis (2.2%).

Bravo et al., (2010), reported that 112 women with complaints of vaginal discharge, diagnosed by Pap smear, 9 (8%) cases were trichomoniasis.

Bringel et al. (2012) noticed that 13.1% of results showed Candida sp., 3.14% of Gardnerella/Mobiluncus and 0.66% of Trichomonas vaginalis.

According to the survey, the sample of 100 patients, 20 presented amendments on laboratory results, 14 (70%) examinations portray resemblance to the clinical description of the gynecological examination at the time of collection.

Table 5: Comparison between laboratory results and clinical examinations of users who performed the Pap smear, Sinop-MT, 2015.

Infectious agents	Clinical description	n	%
Gardnerella vaginalis	Abundant leukorrhea	09	64
Candida sp	White lumpy discharge	04	28,5
Trichomonas vaginalis	Leukorrhea and itching	01	07
Total		**14**	**100**

Source: Research data

According to Brasil (2015), many patients seek care in primary care network complaining about something that considers abnormal in the genital part (for example vaginal discharge), then the nurse holds only a nursing consultation and cytological collection of cervical smear quality not solving the complaint of the patient. The anamnesis, the identification of different vulnerabilities and physical examination should be important elements of STI diagnoses. Health professionals need to know the anatomy and physiology of the male and female tract. During the physical examination is completed, when indicated, there is a collection of biological material for laboratory examination.

Soon, it is important that the professional knows the laboratory results before an STI, or Reproductive Tract Infection (RTI) is relevant to identify the etiologic agent, but perform management plaintiff patients at first contact is the main behavior that will promote improved symptoms and perform break the epidemiological chain, provided that the partner also receive drug treatment in cases of STIs or repeat RTI (BRASIL, 2015).

Of the 100 cases examined in the study period, comparisons between laboratory results and clinical examinations of users who performed the Pap smear analyzed were 14/100 (70%), the prevalence of agents and symptoms respectively, was Gardnerella vaginalis with abundant leukorrhea 09 (64%), which is in agreement with the study of Raugust and Duarte (2012), which shows that the Pap smear, Gardnerella vaginalis is present in the form of leukorrhea.

Regarding Candida sp with,04 lumpy white discharge (28.5%), Raugust and Duarte (2012), in their study also found similar characteristics, featuring candidiasis vaginal discharge with the presence of lumps - cream aspect milk- itching, burning and dyspareunia.

The main clinical feature of the STI is leucorrhea and pruritus 01 (7%), which is stated in Raugust research and Duarte (2012), who showed that women infected with Trichomonas vaginalis most often have discharge due to infiltration of leukocytes ranging from thin, sparse to thick and abundant.

Among the complaints, the most frequent were the genital discharge (74.4%) and vaginal discharge fishy odor that occurred in 68.6% of cases. The presence of grayish fluid and discharge (74.4%) (LEITE, 2010).

Camargo et al. (2015) in a research in Góias with 302 participants, reported the clinical features of vaginal secretion suggestive of bacterial vaginosis in 34.8% of participants, observed greyish white secretion, fluid, with fetid odor, vaginal mucosa without phlogistic, suggestive signs of candidiasis in 16.6%; whitish secretion in adhesive plates to hyperemic suggestive and vaginal mucosa of trichomoniasis in 0.3% with greenish-yellow secretion, fluid, bullous and fetid, in hyperemic and friable vaginal mucosa.

As Boatto et al., (2007), clinical signs and symptoms recorded and expressed in vulvovaginitis with greater or lesser intensity were itching, discharge, dysuria, erythema and burning sensation, with a predominance of discharge and itching.

Schiller test was offered to all women attending the gynecological long as it was feasible its implementation because it was not realized through material shortage at times. There were 100 women who underwent preventive, 68 (68%) had negative Schiller test and 8 (8%) positive Schiller test and 24 (24%) women did not perform the test for lack of material during collection at the health facility.

Table 6: Schiller test of patients who performed the Pap smear, Sinop-MT, 2015.

Test	n	%
Schiller positive	08	08
Schiller negative	68	68
Not performed	24	24
TOTAL	**100**	**100**

Source: Research data

According to Eishima (2007), Schiller test is based on reaction with Lugol solution cytoplasmic glycogen epithelial cells of the cervix and vagina.

It was confirmed by histochemical studies, the absence of glycogen in the areas not impregnated with iodine. In contrast, the clear areas iodine-containing very low in content as was abundant in the cytoplasm of epithelial cells dark brown, and little or no in the neoplastic epithelium (EISHIMA, 2007).

The Pap test should be complemented by Schiller test, to be an auxiliary and effective procedure in finding the cervical lesions. Therefore, the inclusion of mandatory Schiller test in performing the Pap Test, will contribute to the improvement of health conditions of women and thus reduce the costs of public funds, since, being early detected cervical cancer uterus, its treatment is fast, effective and inexpensive.

Conclusion

According to the data analyzed in this study, it was concluded that the infectious agent of higher prevalence compared with the clinical description of abundant leucorrhoea, was Gardinerella vaginalis represented in 09 reports of cervical cytology.

Through preventive screening, some gynecological changes can identify and evaluate and in some cases through the main complaint of the patient and signs/symptoms present in the clinical examination to determine the nature of the causative agent. The professional must know how to identify the signs according to some etiologic agents can facilitate and expedite service to the patient. However, the laboratory findings are required to characterize microbial species.

It is concluded that it is necessary investment in health education, with groups that address women's health, emphasizing the importance of prevention as well as the return of the woman to take the laboratory results and/or post-therapeutic assessment; promoting the performance of more joint efforts for preventive collection for more flexible hours to give opportunity to the patients who has dual journey.

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