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# ANALYSIS OF THE DISTRIBUTION OF GYNECOLOGIC DISEASES TREATED AT A DAY GYNECOLOGY UNIT

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**ABSTRACT — BACKGROUND:** A gynecological day hospital is an alternative to hospitalization enabling to improve accessibility and avoid hospitalizations. Our study investigated the most common gynecologic issues treated in a day gynecology clinic. **METHODS:** The distribution of attendances to a gynecology day hospital was studied in the period from 2015 to 2017. Data collected from the gynecologic diagnoses (a total of 2,908 cases) were standardized according to the International Classification of Diseases in its tenth revision. **RESULTS:** Over the period from 2015 to 2017, noninflammatory disorders of the female genital tract (N80–N99) were predominant in the distribution of gynecologic conditions treated on an outpatient basis, that is, 69.0% in 2015, 78.6% in 2016, and 82.3% in 2017 of the total number of admissions. Among non-inflammatory disorders of the female genital tract, the most common were as follows: polyp of female genital tract (N84); other non-inflammatory disorders of uterus (N85), which include endometrial glandular hyperplasia (N85.0) and endometrial adenomatous hyperplasia (N85.1); erosion and ectropion of cervix uteri (N86); female infertility (N97). **CONCLUSIONS:** Our findings correspond to data obtained in other countries. The main group of diseases is represented by non-inflammatory disorders of the female genital tract. Thus, the data can be used in planning and organizing gynecological care for women undergoing treatment in day facilities.

**KEYWORDS** — distribution of gynecologic diseases, day hospital, noninflammatory disorders of the female genital tract, inflammatory diseases of the female pelvic organs.

## INTRODUCTION

Hospital replacement forms and technologies are being developed actively worldwide. Admission in a day outpatient facility is an effective alternative to 24-h hospitalization [1].

Treatment in an ambulatory facility may include surgical interventions that require postoperative stay under medical supervision for several hours. Studies have confirmed that day clinics improve the comfort of patients' stay in a medical institution, increase the availability of medical care, and help decrease the

number of repeated hospitalizations. The multidisciplinary day outpatient facility of a university hospital of the Andalusian Health Service illustrates that visits to a day clinic decreased inadequate hospitalization and repeated hospitalization by 93.3% and 4.2%, respectively [2].

In the Russian Federation, over the past 10 years, the number of gynecologic hospital beds has decreased by 32.2%. Therefore, outpatient facilities offering gynecologic services provide the female population with the necessary medical care, which positively affects the reproductive potential of the population [3, 4].

Thus, this study analyzed the distribution of gynecologic diseases in female patients treated in a day gynecology clinic operated at a multidisciplinary hospital in a large city.

## MATERIAL AND METHODS

The distribution of attendances to the day gynecology clinic at a multidisciplinary hospital (Moscow Clinical Hospital No.15) was studied in the period from 2015 to 2017. A total of 2,908 hospitalization cases were analyzed (958 cases in 2015, 952 cases in 2016, and 998 cases in 2017). Data collected from the gynecologic diagnoses were standardized according to the International Classification of Diseases in its tenth revision.

## RESULTS AND DISCUSSION

Over the period from 2015 to 2017, non-inflammatory disorders of the female genital tract (N80–N99) were predominant in the distribution of gynecological diseases treated on an outpatient basis, that is, 69.0% in 2015, 78.6% in 2016, and 82.3% in 2017 of the total number of admissions (Fig. 1).

In 2015 and 2016, inflammatory diseases of the female pelvic organs were the second most common (N70–77) and were diagnosed in 20.9% and 12.3% of the cases, respectively. In 2017, in total, 89.5% of the cases belonged to Class XIV "Diseases of the genitourinary system" (90.9% in 2016 and 89.9% in 2015).

In 2015, the remaining 10.1% of diseases were distributed into the following groups: submucosal uterine leiomyoma (Class II "Neoplasms," benign disorders of the uterus and ovaries, D10–D36) with 4.8%, pregnancy with abortive outcome (Class XV "Preg-



**Fig.1.** Structure of gynecological diseases treated in a day inpatient facility in 2015–2017

nancy, childbirth and the puerperium") with 4.9%, and ovarian dysfunction (Class IV "Endocrine, nutritional and metabolic diseases") with 0.4%. In 2016, the remaining 9.1% were distributed into groups, similar to those in 2015, namely, submucosal uterine leiomyoma (Class II "Neoplasms," benign disorders of the uterus and ovaries, D10–D36) with 6.2%, pregnancy with abortive outcome (Class XV "Pregnancy, childbirth and the puerperium") with 2.6%, and ovarian dysfunction (Class IV "Endocrine, nutritional and metabolic diseases") with 0.3%.

In 2017, as regards the structure of gynecological diseases, benign neoplasms (Class II "Neoplasms," benign neoplasms, D25, D26, and D28) ranked second and accounted for 8.1% of the cases, while inflammatory diseases of the female pelvic organs became the third most common (N70–77) and were present in 7.2% of the cases. Pregnancy with abortive outcome (Class XV "Pregnancy, childbirth and the puerperium") accounted for 1.9% of the cases, and ovarian dysfunction (Class IV "Endocrine, nutritional and metabolic diseases") were registered in 0.5% of the cases.

In 2017 the structure of gynecological diseases treated on an outpatient basis was characterized by a decrease in the number of pregnancy with abortive outcome, both in absolute and relative values compared with data obtained from 2015 to 2016.

Among non-inflammatory disorders of the female genital tract, the most common of such groups of diseases were as follows: polyp of female genital tract (N84); other non-inflammatory disorders of uterus (N85), which include endometrial glandular hyperplasia (N85.0) and endometrial adenomatous hyperplasia (N85.1); erosion and ectropion of cervix uteri (N86); female infertility (N97); and other diseases (Table 1).

In 2017, with regard to the distribution of inflammatory diseases of the female pelvic organs, 47.3% of the cases were diagnosed as chronic salpingitis and oophoritis (N70.1), 28.3% were chronic inflammatory disease of uterus (N71.1), and 3.8% cases were subacute and chronic vaginitis (N76.1), which is consistent with the distribution for this group in 2015–2016.

## CONCLUSION

The analysis of the distribution of gynecological diseases treated in the day gynecological clinic corresponds to data obtained in other countries [3]. The main

**Table 1.** Non-inflammatory disorders of the female genital tract treated in the gynecologic day clinic in 2015–2017

Diagnoses	Structure of visits, %		
	2015	2016	2017
Polyp of female genital tract (N84)	33.9	32.7	33.5
Other non-inflammatory disorders of uterus (N85)	17.3	19.5	20.0
Erosion and ectropion of cervix uteri (N86)	16.8	12.5	12.0
Female infertility (N97)	16.3	15.2	11.7
Dysplasia of cervix uteri (N87)	4.1	5.0	10.2
Menopausal and other perimenopausal disorders (N95)	3.9	0.7	0.7
Other non-inflammatory disorders of cervix uteri (N88)	2.5	4.5	8.1
Other non-inflammatory disorders of vulva and perineum (N90)	2.3	4.5	0.6
Excessive, frequent and irregular menstruation (N92)	1.4	2.3	1.5
Non-inflammatory disorders of ovary, fallopian tube and broad ligament (N83)	0.9	1.0	1.0
Pain and other conditions associated with female genital organs and menstrual cycle (N94)	0.6	2.1	0.7
All diagnoses	100.0	100.0	100.0

group of diseases is represented by non-inflammatory disorders of the female genital tract. Thus, results can be used in planning and organizing gynecologic care for women undergoing treatment in day outpatient facilities.

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