

RELATIONSHIP SQUAMOUS ATYPIA OF UNDETERMINED MEANING VERSUS INTRAEPITHELIAL SQUAMOUS LESION, CYTOLOGY LABORATORY OF THE SANTO DOMINGO HEALTH AREA MANAGEMENT THIS PERIOD JULY TO DECEMBER 2016 AND 2017

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Abstract: The fundamental core of the fight against cervical cancer is the cytological recognition of intraepithelial lesions, with cervical cancer being the second most common neoplasm in women in the world with 86% of cases. The relationship between squamous atypia of undetermined significance (ASC-US) versus squamous intraepithelial lesion (SIL) was assessed as a statistical tool of the Santo Domingo Este Health Management Laboratory, in the period July-December 2016-2017. It is a retrospective descriptive study, where 3,275 samples were processed, of which 226 corresponded to cellular anomalies. The frequency of SIL in the 2017 study period presented a slight decrease, which was attributed to factors such as poor extension of the samples and poor fixation, which alter the preservation of the samples and could limit the assessment of the lesion by leaning towards an ASC-US. Despite the slight decrease in LIE, this was not 2 or 3 times lower than the proportion of ASCUS according to experts' recommendations, the frequency of ASC-US did not exceed the standards established in the literature. 18% of the samples had more than three limitations and the cytological smears were performed by nurses in some of the health centers. No publications have been found on the ASC-US /LIE relationship in the Dominican Republic as far as research has been possible. The diagnostic trend of the GSDE Cytology Laboratory in the study period did not exceed the standards established in the literature; despite the limitations found in the slides due to poor spread of the samples, therefore it is recommended to develop the skills of the nurses who perform cytological smears and continuous training for general practitioners and interns to reduce the possibilities of inadequate samples. The histopathological follow-up of this series remains to be investigated.

Keywords: Cancer, cytology, medicine.

INTRODUCTION

The fundamental core of the fight against cervical cancer is the cytological recognition of intraepithelial lesions^(1,8). Cervical cancer is the second most common cancer in women in the world, with 86 percent of cases and 88 percent of deaths in developing countries, and is the most important cause of years of life lost. (due to cancer) among women in Latin America and the Caribbean, where 13 percent of the cases and 12 percent of the deaths that occur annually in the world are concentrated.

In the Bethesda 2001 classification, indeterminate squamous atypia is defined as: "histological alterations suggestive of intraepithelial lesion but quantitatively and/or qualitatively insufficient for a definitive interpretation", eliminating reactive ASCUS (2,9,10,20). As a frequency guide, this diagnosis must not exceed the intraepithelial lesion rate of a given laboratory by 2-3 times or be even lower with the new ASC-US definition. Apart from the relationship between squamous atypia of undetermined significance versus squamous intraepithelial lesion (ASC/SIL) as a quality control tool, cyto-histological follow-up, comparison with the search for Human Papillomavirus (HPV) are also recommended as control factors.) and the combination of several of the aforementioned recommendations^(2,5,6,7)

One of the concerns of the pathologist is to improve and maintain the quality of cytology laboratory services and for this a series of tools are implemented for internal quality control in cytology laboratories, such as:

- The relationship Atypia of Undetermined Significance (ASC-US) versus Squamous Intraepithelial Lesion (SIL),
- Cyto-histological follow-up control, comparison with the search for human papillomavirus (HPV),
- Quick review of negative slides

and combinations of various recommendations mentioned (2,5,6,7)

- PAHO proposes the creation of the Red-PAC: a network of participating laboratories that work together to improve the quality of diagnoses.(18)

The variability between laboratories is such that some present figures of up to 20 percent of ASCUS cytology. In this regard, the guidelines of the National Cancer Institute in the United States state that only 5 percent or less of cytology tests issued by a laboratory must have this diagnosis. Likewise, in high-risk populations, the proportion must be less than 2-3 times the reported squamous intraepithelial lesion.⁽³⁾

Given that the ASCUS-LIE relationship has been established as one of the quality control tools, we propose to evaluate the ASCUS-LIE relationship, in the cytology laboratory of the Santo Domingo Este Health Management, in a period that includes July to December 2016 and 2017, because said laboratory began on May 17, 2016.

AIM

To assess the relationship between squamous atypia of undetermined significance versus squamous intraepithelial lesion (ASCUS/SIL) as a quality control tool in cervical-vaginal cytology.

SPECIFIC OBJECTIVES

- Identify the frequency of cervical -vaginal cytology by health establishment in the study periods.
- Check the frequency of squamous atypia of undetermined significance by health center
- Assess the relationship of Squamous Atypia of Undetermined Significance versus Squamous Intraepithelial Lesion (ASCUS/SIL) in the study periods.

RESEARCH METHODOLOGY

This is a descriptive, retrospective study of the total number of cytology tests with cervicovaginal abnormalities processed in the cytology laboratory of the Santo Domingo Este Health Area Management and diagnosed with Squamous Atypia of Undetermined Significance and Low and High Grade Squamous Intraepithelial Lesion. according to Bethesda criteria, in the periods July to December of the years two thousand sixteen (2016) and two thousand seventeen (2017).

The samples are conventional smears stained with: hematoxylin, Orange G and EA-50.

The results were tabulated and graphed with Excel 2017.

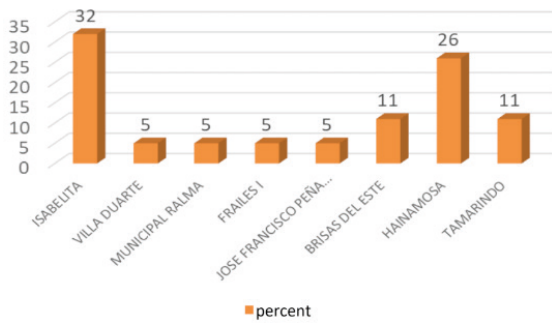
Cases from unreported centers were excluded (10), 7 were ASC-US and 3 were LIE.

RESULTS

CLINIC	ASC-US 2016	PERCENT
ISABELITA	6	32
VILLA DUARTE	1	5
RALMA MUNICIPALITY	1	5
FRIARS I	1	5
JOSE FRANCISCO PEÑA GOMEZ	1	5
EASTERN BREEZES	2	eleven
HAINAMOSA	5	26
TAMARIND	2	eleven
TOTAL	19	100

Table 1. FREQUENCY OF ASC-US PERIOD JULY-DECEMBER 2016

Source: results from the Health Management file



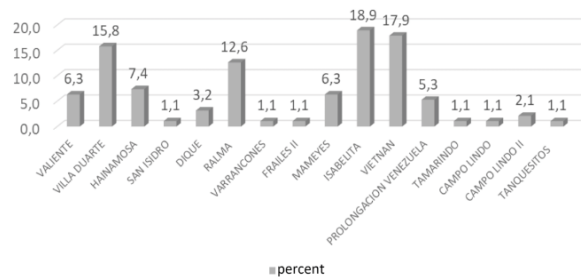
Graph 1. ASC-US PERCENTAGE DISTRIBUTION IN THE HEALTH CENTERS OF THE SANTO DOMINGO HEALTH AREA MANAGEMENT THIS PERIOD JULY TO DECEMBER 2016

Source: results from the Health Management file

CLINIC	ASC-US 2017	ASCUS-H
BRAVE	6	
VILLA DUARTE	fifteen	1
HAINAMOSA	7	
SAN ISIDRO	1	
DAM	3	
RALMA	12	2
BARRANCONES	1	
FRIARS II	1	
MAMEYES	6	
ISABELITA	18	
VIETNAM	17	1
VENEZUELA EXTENSION	5	2
TAMARIND	1	
CUTE FIELD	1	
CAMPO LINDO II	2	
TANKS	1	
TOTAL	95	6

Table 2. FREQUENCY OF ASC-US JULY-DECEMBER 2017

Source: results from the Health Management file



Graph 2. PERCENTAGE DISTRIBUTION OF ASC-US IN THE HEALTH CENTERS OF THE SANTO DOMINGO HEALTH AREA MANAGEMENT THIS PERIOD JULY TO DECEMBER 2017

Source: results from the Health Management file

CLINIC	LIEBG	LIEAG
	(NIC I/HPV) 2016	(NICII/III) 2016
THE DAM	2	
ISABELITA	6	1
VILLA DUARTE	3	1
SAN BARTOLO	1	
FRIARS I	3	
FRIARS III	1	
EASTERN BREEZES	3	
HAINAMOSA	11	
TAMARIND	1	
THE LITTLE TANKS	2	
TOTAL	33	2

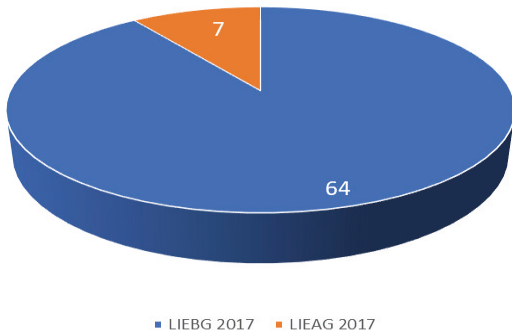
Table 3. FREQUENCY OF SQUAMOUS INTRAEPITHELIAL LESION PERIOD JULY-DECEMBER 2016

Source: results from the Health Management file

CLINIC	LIEBG 2017	LIEAG 2017
JOSE FRANCISCO PEÑA GOMEZ		1
VILLA DUARTE	8	4
HAINAMOSA	5	
DAM	4	1
RALMA	9	
FRIARS II	1	
MAMEYES	1	
ISABELITA	6	
VIETNAM	8	
PROLONG. VENEZUELA	9	
SMALL MOUTH	1	
TAMARINO	1	
PRESIDENCY	2	
SAINT LOUIS	5	1
CAMPO LINDO II	2	
URENA	1	
SAN BARTOLO	1	
TOTAL	64	7

Table 4. FREQUENCY OF SQUAMOUS INTRAEPITHELIAL LESION PERIOD JULY DECEMBER 2017

Source: results from the Health Management file



Graph 3. FREQUENCY OF DIAGNOSED CASES OF SQUAMOUS INTRAEPITHELIAL LESION PERIOD JULY DECEMBER 2017

Source: results from the Health Management file

	2016	2017
	PERCENT	PERCENT
ASCUS/LIE	2.4/4.4	4.3/3
CENTERS THAT WERE DIAGNOSED ASC-US	twenty%	40%
CENTERS THAT WERE DIAGNOSED LIE	30%	40%

Table 4. ASC-US/LIE RELATIONSHIP PERIOD JULY-DECEMBER 2016

Source: results from the Health Management file

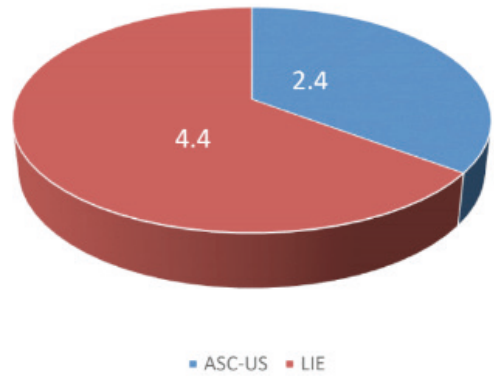


Table 4. ASC-US/LIE RELATIONSHIP PERIOD JULY-DECEMBER 2016

Source: results from the Health Management file

The proportion of ASC-US must not exceed 5% and most publications report an incidence of 2.5-3%.^{1,3,13}

ASC-US/LIE RATIO GSDE 2017

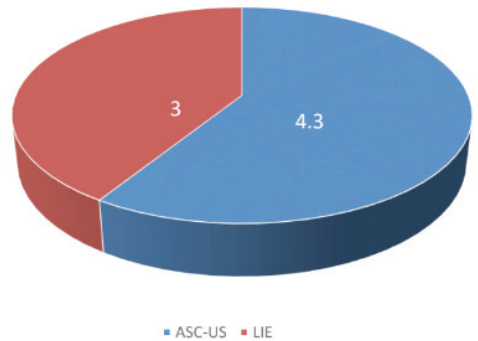


Table 4. ASC-US/LIE RELATIONSHIP PERIOD JULY-DECEMBER 2017

Source: results from the Health Management file

Although the variability between laboratories is such that some present figures of up to 20%, 13.6% according to our bibliographic references ^{1,7} In our study the values were below 5 percent.

Most experts recommend that the diagnosis of ASC-US does not exceed two or three times that of LIE ^(2,9,19).

CONCLUSION

In this study, we assessed the relationship of atypical squamous lesions of undetermined significance versus squamous intraepithelial lesions as a statistical tool of the cytology laboratory of the Santo Domingo Este Management, to appreciate the trend of squamous intraepithelial lesion of the cervix in the cytology laboratory of the GSDE in the periods of July-December 2016-2017.

We found a total of 3,275 samples, of which 787 correspond to the period July-December 2016, which began with 20 percent of the establishments and for the period July-December 2017 presented a total of 2,488 samples from 42.5 percent of the establishments. percent of health facilities.

172 Samples were reported with cellular anomalies, of which 101 corresponded to squamous atypia of undetermined significance, for the study period July-December 2016-2017 for 2.4 and 4.3 percent. respectively; The slight variation that the 2017 period presents is striking, although we are in accordance with the literature; The proportion of ASC-US must not exceed 5 percent and most publications report an incidence of 2.5-3 percent. Although the variability between laboratories is such that some present figures of up to 20%, 13.6% according to our bibliographic references (1).

The frequency of squamous intraepithelial lesion was 106 diagnoses for 4.4 percent for 2016 and 3 percent for 2017; The slight decrease in LIE for the period July-December

2017 also draws attention, which we attribute to factors such as sheets with poor fixation, poor preservation, very darkened sheets due to hemorrhage and inflammation that could limit the assessment of the injury. Evidently the ASC-US/LIE ratio for this period was (4.3/3 percent).

We also found that 27 percent of the samples received in this study period were limited and unsatisfactory due to poor collection and poor spread of the samples; which corresponded to thick extension 26 percent, absence of endocervicals 19 percent, hemorrhagic diathesis 20 percent, poor preservation 10 percent, 18 percent had more than 3 limitations and 0.7 percent corresponded to broken laminae. Therefore, we inquired about the personnel who take and spread the sample, resulting in an unexpected situation in which in some centers the smears are carried out by the nurses; In general, samples are taken by interns, general practitioners and gynecologists.

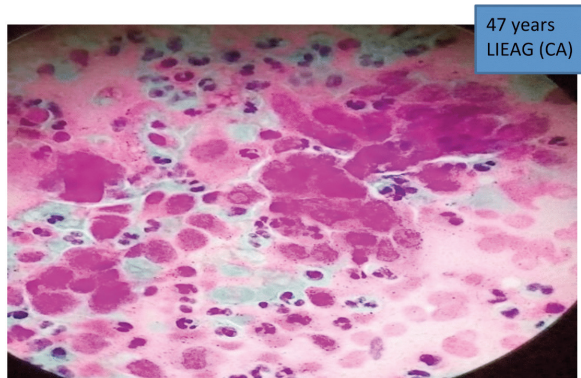
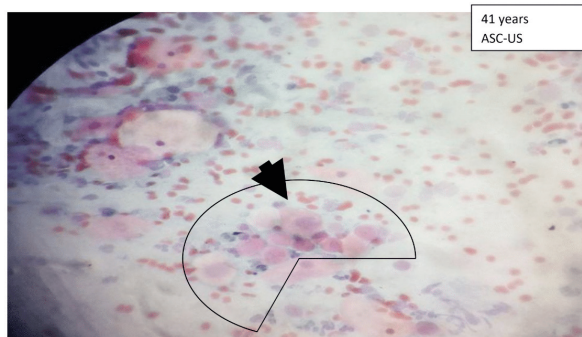
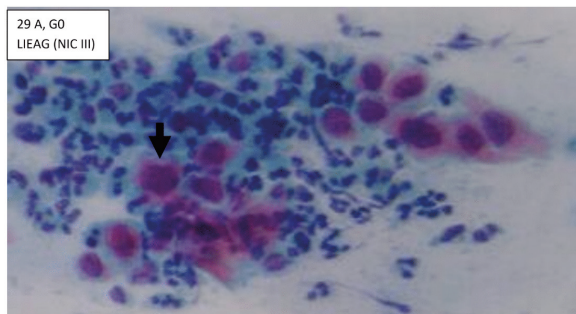
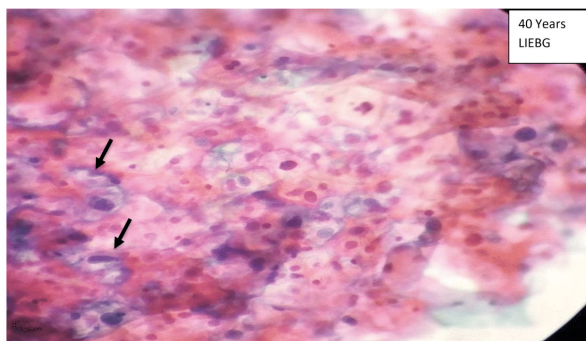
RECOMMENDATIONS

Training in sample collection for general practitioners and interns who start working in health facilities, on an ongoing basis to reduce the possibilities of inadequate samples.

Improve, expand and develop the training and skills of nurses who perform cytological smears in health centers.

Introduce adequate personnel both in the cytology laboratory and in the establishments where Pap smears are performed to reduce the workload so that patients receive the satisfaction of being treated appropriately, with the assurance of a correct diagnosis and results in a timely manner.

IMAGES



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