

# SPECTRUM OF CERVICAL LESIONS IN AND AROUND KOODAPAKKAM. A STUDYFROM TERTIARY CARE HOSPITAL, PUDUCHERRY

# Dr. A. Manoharan<sup>1\*</sup>, Dr.Pammy Sinha<sup>2</sup>

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## Abstract:

Cervical epithelium is prone for many diseases ranging from simple inflammatory lesions to malignancy. Cervical carcinoma is the second most common cancer among women which cause higher mortality. The most common age group is around 50 years and above. Thus identifying the cervical lesions and assessing its incidence in particular geographical area helps in acquiring adequate knowledge about the prevalence of disease and it helps to take preventive measures, early diagnosis and treatment.

#### **Aims and Objectives:**

1. To identify the spectrum of cervical lesions in a tertiary care hospital with respect to age group.

#### **Materials and Methods:**

The samples were collected from the cervical biopsy specimen sent to histopathology laboratory of Sri Lakshmi Narayana Institute of Medical Sciences, Puducherry.

Study period: One year from January 2022 to December 2022.

### **Results:**

Out of 265 cervical lesions, the most common lesions are chronic non specific cervicitis(196) followed by CIN I(13), CIN II(29), endocervical polyp(19) and then cervical carcinoma(8). The most common age group affected with cervical carcinoma are 50-70 years.

**Conclusion:** This study shows spectrum of cervical lesions prevailing in this area and also helps to identify the vulnerable age group to various cervical lesions

#### Keywords: Cervical carcinoma, histopathology

<sup>1\*</sup>Associate Professor, Department of PathologySri Lakshmi Narayana Institute of Medical Sciences, Puducherry

<sup>2</sup>Professor and Head, Department of Pathology Sri Lakshmi Narayana Institute of Medical Sciences, Puducherry

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### 1. Introduction:

Cervical carcinoma is the second most common cancer among women which cause higher mortality. These cervical carcinoma usually occurs in the transformation zone of cervix which contains ectocervix lined by squamous epithelium and endocervix lined by columnar epithelium. The most common age group is around 50 years and above. These cervical epithelium is prone for many diseases ranging from simple inflammatory lesions to malignancy<sup>1-4</sup>.

Due to the various screening procedures in cervix such as PAP smears, the incidence of cervical cancer has reduced a lot in developing countries<sup>4,5,6</sup>. The identification and confirmation of cervical lesions is mainly by histopatholgical examination. Cervical biopsy helps in confirmation of various neoplastic and non-neoplastic lesions of cervix<sup>2,3,7,8</sup>.

Thus identifying the cervical lesions and assessing its incidence in particular geographical area helpsin acquiring adequate knowledge about the prevalence of disease and it helps clinicians for early diagnosis and early treatment.

#### Aims and Objectives:

1. To identify the spectrum of cervical lesions in a

tertiary care hospital with respect to age group.

#### 2. Materials and Methods:

The samples were collected from the cervical biopsy specimen sent to histopathology laboratory of Sri Lakshmi Narayana Institute of Medical Sciences, Puducherry. It's a retrospective study in which cervical biopsies are received from the OBG department of Sri Lakshmi Narayana Institute Of Medical Sciences, Puducherry. These specimens are fixed in formalin, processed and slides were prepared which is stained with H&E.

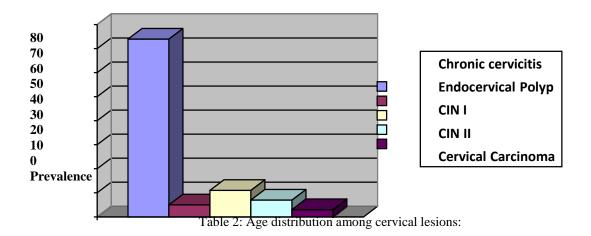
**Study period:** One year from January 2022 to December 2022.

#### **Results:**

In the present study, the total number of cervical samples were 265. The most common lesions are chronic nonspecific cervicitis (196) followed by CIN I(13), CIN II(29), endocervical polyp(19) and then cervical carcinoma(8). The most common age group affected with cervical carcinoma are 50-70 years. The common age group affected with chronic cervicitis ranges from 30-50 years.

Table 1: Frequency and distribution of cervical lesions			
Cervical lesions	Number of cases affected	Percentage(%)	
Chronic cervicitis	196	74	
Endocervical Polyp	13	5	
CIN I	29	11	
CIN II	19	7	
Cevical Carcinoma	8	3	

Chart 1: Distribution of cervical lesions:



Cervical lesions	Mean Age group (in years)
Chronic cervicitis	45
Endocervical Polyp	38
CIN I	40
CIN II	52
Cervical Carcinoma	60

#### 3. Discussion:

The cervical lesions can be either neoplastic or non neoplastc. The non - neoplastic lesions are cervicitis, polyps, etc... The causative agents for cervicitis are of mostly infective such as bacterial, viral, fungi, etc... Sometimes the infection can spread though sexually transmitted infections and urinary tract infections. But the cervical carcinoma has main etiology of Human papilloma virus infection(HPV) and CIN<sup>1,3,4,6,9,10</sup>.

The present study shows the most common cervical lesions are chronic cervicitis(74%) which is similar with studies of Mandakini et al(48%) and Avani et al(59%). And the second mostcommon is CIN lesions(18%) which is correlating with Mandakini et al (11.5%) and Avani et al(22.5%) But with respect to cervical carcinoma, the current study correlates with Avani et al but not with Mandakini et al.

Similarly with respect to non neoplastic and neoplasic lesions, the current study correlates with Avani et al, Kumari et al but not with Ali at al.

With respect to age group, cervical carcinoma occurs in the mean age group of 60 years which is inaccordance with Ali et al which also contains the mean age group of 63 years.

Cervical lesions	Mandakini et al	Avani et al	Present study
Chronic cervicitis	48 %	59%	74%
Endocervical Polyp	-	12.5%	5%
CIN	11.5 %	22.5%	18%
Cevical Carcinoma	34.6 %	3.5%	3%

Table 3: Comparison with other studies with respect to cervical lesions:

#### Table 4: Comparison of non neoplasic and neoplastic lesions:

Other studies	Non- neoplastic lesions	Neoplastic lesions
Avani et al	73%	5%
Kumari et al	49.3%	35%
Ali et al	46.3%	51%
Present study	79%	3%

#### 4. Conclusion

Cervical lesions are more common nowadays. This study shows spectrum of cervical lesions prevailing in this area and also helps to identify the vulnerable age group to various cervical lesions. These data will be more helpful in providing adequate knowledge about the spectrum of cervical lesions in a particular geographical area and to rule out the etiological factors, henceforth adequate preventive measures can be taken.

#### 5. References:

- Kumari K, Umarani M.K, Bharathi M. Histopathological spectrum of cervical biopsies – a 5 year retrospective study. Trop J Path Micro 2017;3(1):46-51.
- Anuradha Sharma, Sonia Singh. Spectrum of cervical lesions and cytohistological correlation: a study in tertiary care center. International Journal of Contemporary Medical Research 2019;6(6):F5- F10.
- Jones and Novis cervical biopsy and cytology correlation: arch pathology lab med-vol. 120, june 199610.1200/JCO.2005.04.3661.
- Mohammed H.M. Ali, Hussain Gadelkarim Ahmed, Rashid Awad Salih et. al. Histopathologic Pattern of Cervical Lesions at Omdurman Military hospital, Sudan. Scholars Journal of Applied Medical Sciences 2015; 3(8C): 2903-07.
- Kiranmayi et al. "Morphological Spectrum of Cervical lesions with an emphasis on

Neoplastic lesions - a 2year retrospective study." IOSR Journal of Dental and Medical Sciences (IOSR-JDMS), vol. 16, no. 11, 2017, pp. 54–57.

- Jain A, Dhar R, Patro P et.al. Histopathological study of cervical lesions. Int J Health Sci Res. 2018; 8(11):82-87.
- Mandakini Patel et al. Histopathological spectrum of cervical lesions- Our institute experience. Indian Journal of Pathology and Oncology, April-June, 2018;5(2):338-340.
- Chaithanya K, Kanabur DR, Parshwanath HA. Cytohistopathological Study of Cervical Lesions. Int J Sci Stud 2016;4(2):137-140.
- Hurt WG, Silverberg SG, Frable WJ, Belgrad R, Crooks LD. [26]Adenocarcinoma of the cervix: histopathologic and clinical features. Am J Obstet Gynecol. 1977;129(3):304-15.
- Srivani Saavan, Jonathan Arnold, Arul P. "Histomorphological Spectrum of Lesions of the Cervix, A Retrospective Study in a Tertiary Care Hospital". Journal of Evoloution of Medical and Dental Sciences 2015;Vol 4, Issue 59, July 23;Page:10326-10329.