Study of Regression and Progression rates of Non 16/18 HR-HPV positive among post-menopausal women

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INTRODUCTION

Cervical cancer is a preventable disease following the discovery of its causative agent, Human Papillomavirus Virus (HPV)[1]. Infection with high risk HPV (HR-HPV) first leads to cervical intraepithelial neoplasia (CIN), a known precursor of cervical cancer. While common and often resolving spontaneously, persistent HR-HPV infection is a major predictor for cervical cancer[2]. Thus, HPV DNA testing has emerged as a superior cervical cancer screening tool compared to cervical cytology with higher sensitivity in detecting CIN 2+ disease. However, HPV testing's poorer specificity has led to a rapid rise in colposcopy referrals[3]. One such group is postmenopausal patients with persistent non 16/18 HR-HPV infection without cytological abnormalities. This results in high logistical and economical burden on limited colposcopy resources.

AIM

The objective of our study was to study the progression rate of HR-HPV infection in postmenopausal women over three years of follow-up.

METHODOLOGY

This is a retrospective registry-based cohort study of cytology and HPV test results utilising data between 2019 and 2023 from the Cervical Screening RedCap database at NUH following implementation of primary HPV DNA testing for cervical cancer screening in Singapore.

We selected sexually-active, postmenopausal women referred for colposcopy due to persistent non 16/18 HR-HPV infection. We extracted relevant demographic and clinical information (risk factors, HPV DNA results, previous histology, previous cervical cytology results, colposcopy findings, history of treatment for cervical disease, and the use of vaginal oestrogens). All analyses was performed using SPSS software (Version 20, IBM, Chicago, IL, USA).

RESULTS

A total of 199 post-menopausal women with persistent non-16/18 HR HPV were included in this study:

- 187 (94.0%) of these patients were non-smokers
- 195 (98.0%) of these patients were not HPV vaccinated
- Mean age of the patients: 62.5 ± 6.5 years

Mean duration of period of follow-up for these patients: 19.0 ± 14.9 months

During first colposcopy for these patients:

- 112 (56.3%) was Atrophic
- 40 (20.1%) was Grade 1
- 14 (7.0%) was Grade 2
- 33 (16.6%) was Normal

Complete follow-up data was available for 158 of these women (79.4%), with 41 patients being lost to follow-up

Number of patients with HSIL at first review in colposcopy clinic: 8 (5.0%)

During surveillance period for the remaining 150 patients:

- 129 (81.6%) did not have any progression of disease
- 21 (13.3%) had progression, of which 12 (7.6%) progressed to HSIL

Treatment was administered for 23 (11.6%) of these patients

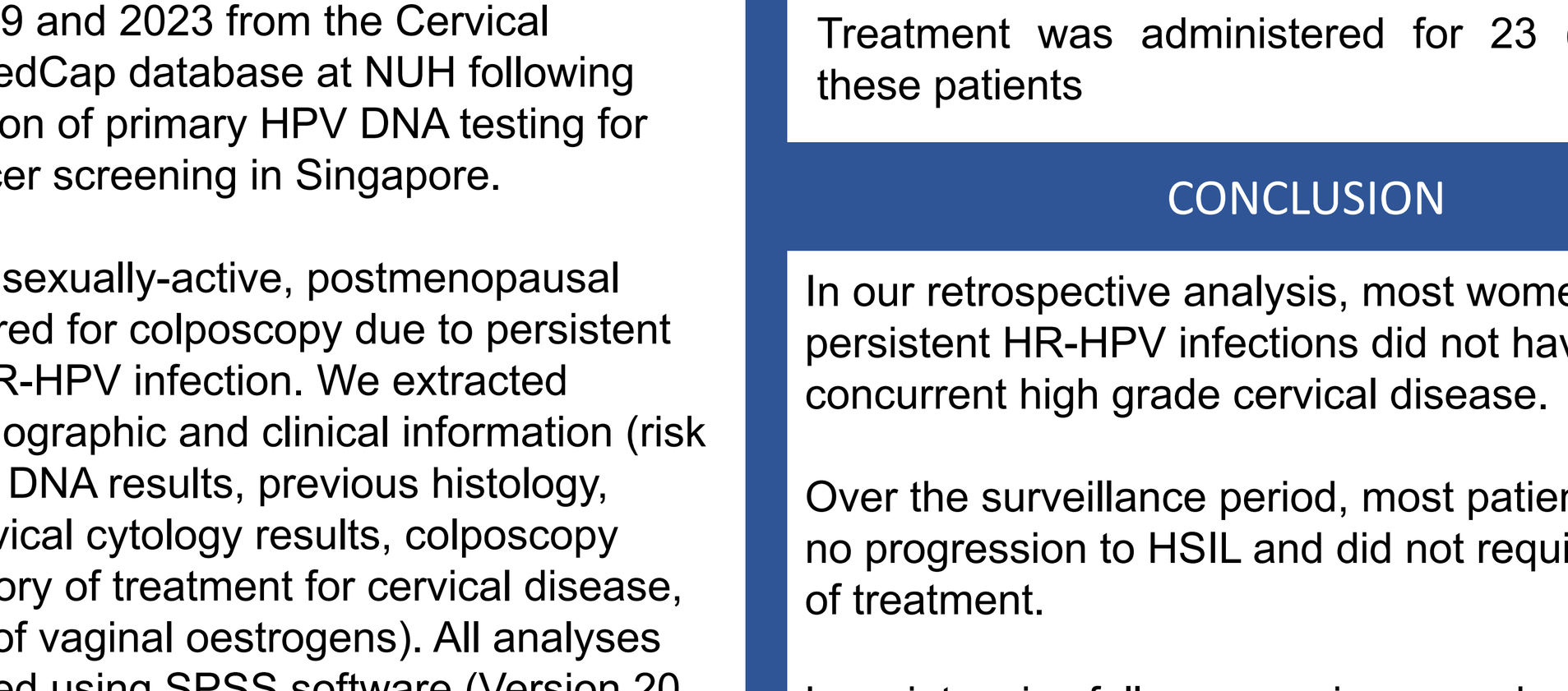
CONCLUSION

In our retrospective analysis, most women with persistent HR-HPV infections did not have any concurrent high grade cervical disease.

Over the surveillance period, most patients showed no progression to HSIL and did not require any form of treatment.

Less intensive follow-up regimes can be considered for these women to reduce burden on colposcopy services especially after initial evaluation.

DATA VISUALISATION



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