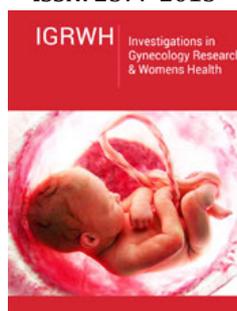


Integrating CERVICO-Vaginal Smear into the Overall Management of Women Living with Human Immunodeficiency Virus (HIV) at the Day Hospital of the Infectious Diseases Department at the University Hospital Mohammed VI in Marrakesh

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Abstract

Objective: integrated the implementation of the cervico-vaginal smear into the activity of the infectious diseases department.

Materials and Methods: This is a prospective study conducted within the department of infectious diseases since January 2019. The cervico-vaginal smear was proposed and carried out in women living with HIV and followed at the day hospital.

Results: Fifty-five patients were collected. The average age was 37 years [19-65 years]. Smoking was found in 8 patients. The average age of first sexual intercourse was 20 years with extremes ranging from 16 to 32 years. At the time of the smear, the average CD4 was 729 /mm². A total of 14 (25.4%) patients had a CD4 < 500. Of the 55 smears performed, the result was as follows: in 4 patients the smear was poorly preserved, 7 patients pauci-cellularity. For the rest the cervico-vaginal-smear was normal in 11 patients (25%), inflammatory in 26 patients (59%), seven (16%) patients had cytological abnormalities of Atypical squamous cells of unknown significance (ASCUS). Colposcopy was performed in 2 patients with TAG I, one of whom had a biopsy. At the biopsy there was polyploid ectropion altered by a severe chronic inflammatory lesion, without signs of specificity or malignancy.

Conclusion: This work has allowed us to integrate and facilitate the adhesion of women living with HIV to the cervico-vaginal smear, as well as a close collaboration between infectiologist and gynecologist for better management.

Keywords: Pap smear; Cervical cancer; HIV

Introduction

Cervical cancer is the fourth leading cause of cancer and cancer death among women worldwide [1]. According to the International Agency for Research on Cancer (IARC) in 2018, the global incidence is estimated at 570,000 new cases per year, of which more than 80% occur in developing countries [1]. In Morocco, the cervical cancer represents a major public health problem. It ranks second, after breast cancer in Moroccan women [2]. The incidence of cervical cancer remains high among women living with HIV. However, many studies have shown that this population has an increased risk of developing intraepithelial cervical neoplasia [3]. In the fight against cervical cancer, Morocco has a national cancer control programme under the aegis of the LALLA SALMA Foundation since 2006, thus enabling the creation of reference centers for screening and diagnosis of cervical cancer [4]. Women living with HIV often escape this program because of fear of stigmatization and disclosure of their HIV status. It is in this perspective that we have integrated the implementation of the cervico-vaginal smear (Pap smear) into the activity of the infectious diseases department for early detection in order to make recommendations regarding management.

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Materials and Methods

This is a prospective study conducted within the department of infectious diseases since January 2019. The Pap smear was proposed and carried out for women living with HIV and followed at the day hospital of the department of infectious diseases of Arrazi hospital. A total of 55 Pap smear were completed after the patients consent. The infect ologists benefited from a training provided by the Obstetrics and gynecology Department of the University Hospital Mohammed VI concerning the realization of Pap smears. The samples were taken in a room dedicated within the department of infectious diseases and equipped with a gynecological table with the necessary materials such as disposable speculums, swabs, clean gloves, surgical masks and a lamp post.

The Pap smear was offered to all HIV positive women who have been followed for at least one year and who have attended the day hospital. Once accepted before implementation, all contraindications were ruled out including menstruation, genital infectious, sexual intercourse least than 48 hours.

For all patients, the following information were collected: epidemiological data, risk factors, age of first sexual intercourse, parity, unprotected sex, occupation, smoking), the anti-retroviral treatment received, and the results of the immuno-virological assessment. Once the samples were collected, they were sent to the histo-pathology department of the Arrazi Hospital. The Pap smear was conducted in accordance with a number of recommendations, from ANAES 2002 [5]. The cytological diagnosis was based on the Bethesda classification [6].

Result

During this period, 70 patients were offered Pap smear among which 55(78.5%) agreed and 15 patients refused (21.4%). None of our patients had a subsequent Pap smear. The average age was 37years with extremes ranging from 19 to 65years. The average age of first sexual intercourse was 20 years with extremes ranging from 16 to 32 years. The socio-professional categories are as follows: 10 housewives (18%), 6 waitresses (11%), 8 sex workers (15.5%) and one civil servant. According to marital status 26 were married (47.2%), 13 divorced (26.6%), 10 single (18%) and 6 widows (11%).

The risk factors for the cervical cancer were: multiparity, use of oral contraceptives, and smoking was found in 8 patients (14.5%). At the time of the smear, the average CD4 was 729/mm³. A total of 14(25.4%) patients had a CD4 < 500/mm³. Regarding the anti-retroviral treatment all our patients were on treatment. Of the 55 smears performed, the result was as follows: for 4 patients the smear was poorly preserved, 7 patients pauci-cellularity. For the rest of the patients the distribution is shown in Figure 1. Seven (16%) patients had cytological abnormalities of Atypical squamous cells of unknown significance (ASCUS). Colposcopy was performed in 2 patients with atypical transformation grade 1, one patient had a

biopsy, who reveled polypliod ectropion altered by a severe chronic inflammatory lesion, without signs of specificity or malignancy.

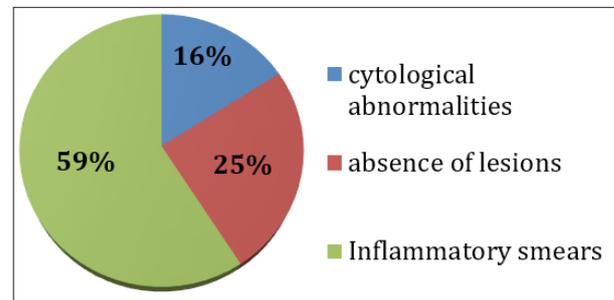


Figure 1: Distribution of women according to Cervico-vaginal smear results.

Discussion

Women living with HIV have an increased risk of developing intraepithelial cervical neoplasia. Screening represents a major therapeutic axis and must be systematic in HIV positive patients to prevent progression to dysplastic lesions. Cervical cancer is one of the easiest forms of cancer to prevent and cure, for a reason vaccination to HPV, early screening and treatment. In a cohort in Morocco, the prevalence of HPV among women living with HIV was 39.3% [7] and HPV vaccines were introduced in 2008 and recommended for girls before the beginning of sexual activity [4]. However, the cost of available HPV vaccines remains high and is not affordable for the majority of the population. Early detection by Pap smear has proven its effectiveness. For women living with HIV, cervical-uterine cytology testing for cervical cancer is recommended when HIV is discovered. The frequency of monitoring according to Morlat reports is as follows: In the absence of a prior intra-epithelial squamous lesion, cytology will be monitored annually for 3 years.

After three normal consecutive cytologies, subject to a controlled HIV load and a CD4 level of > 500/mm³, cytology is performed every 3 years at the same rate as the general population. In other situations, cytology should be monitored annually [8]. In Morocco, this population often escapes the screening program because for the fear of discrimination and disclosure of their HIV status. With this in mind, we conducted a national pilot study on the integration of the Pap smear into the overall management practice of patients followed in our day hospital. During this experiment the Pap smear was proposed in 70 patients, we recorded 16% of refusals due largely to lack of awareness of cervical cancer and screening methods, lack of symptoms, lack of awareness of cervical cancer risk factors and fear of testing [9,10]. This work allowed us to join women living with HIV in the cervico-vaginal smear as none of our patients had a subsequent Pap smear. Of the 55 cervico-vaginal smears in our study, 7 had cytological abnormalities and were referred to the gynecology department for colposcopy. One of the major difficulties encountered during the study was the refusal of some patients to perform the exam, nevertheless we hope and

aim to convince more and more of them over time. Knowledge of risk factors and the target population is essential for prevention. Several risk factors have been identified in the literature: persistent HPV infection, the multiplicity of sexual partners, smoking, the use of oral contraceptives, lack of hygiene, immunodeficiency [2,11-13].

Conclusion

This work has allowed us to integrate and facilitate the adhesion of women living with HIV to the Pap smear, as well as a close collaboration between infectiologist and gynecologist for a better management.

However more actions are needed:

1. National HIV awareness
2. HPV typing
3. Promoting HPV vaccination.

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