SAS Journal of Surgery (SASJS) **ISSN 2454-5104**
Abbreviated Key Title: SAS J. Surg.

A Unit of Scholars Academic and Scientific Society, India

Oral Carcinoma Concomitant with Intraepithelial Neoplasia: Diagnostic and Management Challenges

Reda Hejjouji*, Jawad Lahma, Mohammed Anas Benbouzid, Abdelilah Oujilal, Leila Essakalli
Ent Department, Ibn Sina University Hospital, Mohammed V University, Rabat, Morocco

Original Research Article

***Corresponding author**
Reda Hejjouji

Article History
Received: 29.12.2017
Accepted: 16.01.2018
Published: 30.01.2018

DOI:
10.21276/sasjs.2018.4.1.5

Abstract: Squamous cells carcinoma of the oral cavity is a rare entity often due to the HPV and its diagnosis and /or management can be quite challenging. Cervical intra-epithelial neoplasia is an early stage of cervical cancer in which etiologic determinants are early sex intercourses, multiple partnership and sexually transmitted diseases and, once again HPV infection is known to represent a key factor. Herein we report a case of oral cancer concomitant to a cervical intra-epithelial neoplasia, and discuss about currently available therapeutic options and the difficulties encountered in a relatively low incomes country.
Keywords: Squamous cells carcinoma, epithelial neoplasia.

INTRODUCTION

Head and neck cancers can be divided into two different clinical entities in the basis of their association with the high risk HPV types (16 and 18) [1]. Namely, one must distinguish between HPV-induced cancers and HPV-nonrelated cancers, in which alcohol and tobacco consumption constitute the main etiologic factors [2]. Moreover, these two entities are quite different considering theirs clinical, molecular and prognostic profiles. Also, it has been shown that even the profile of the incriminated HPV in immunohistochemistry can give useful information for the management and prognosis [3-7].

Oral papillomas are infrequent exophytic lesions due to HPV. If their diagnosis is classically straightforward, on the other hand, the confirmation of their nature and / or benignity requires a pathologic study [3, 4].

The literature has proven that the differential diagnosis covers a large spectrum, including carcinoma and others specific clinical entities. Also, malignant transformation of papillomas is a well-known event which renders the clinical approach challenging [4-6]. In developed countries, the frequency of carcinomas has declined during the 2 latest decades, due to the lowering of 2 classical etiologic factors observed in the general population, namely alcohol and tobacco consumptions. But in the same time, the number of HPV-related carcinomas has raised [7]. The respective features of the disease in North Africa are not well defined.

Herein we report on a case of HPV-inducted oral carcinoma, initially diagnosed as a papilloma and in which the correct diagnosis has been established at the pathologic study stage. We also highlight the difficulties encountered of a ENT department in a country with relatively low incomes.

Medical chart

Miss H.F., 38 years, presented in our institution because of the occurrence of a lesion in the internal face of the oral cavity. First of all, the patient reported no specific individual and/or familial medical or surgical history. The disease started one year before as a tumefaction in the right internal of the oral cavity, without any accompanying sign: no pain, no bleeding. She presented because of the regular progression of the lesion.

The patient has divorced a long time before. She said that he began sexual activity when she was 16, and that she has had multiple sexual partners. Then she reported 3 STI episodes 15, 3 and 2 years before, respectively.

Endo-oral examination exhibited normal mouth opening, a fair good dental status but a massive tumefaction in the right oral cavity, running from the right labial commissure forward to the right retro-molar trigone back. It extended up to the upper molars and down to the vestibule. During the bi-digital palpation, the mass was indured but did not infiltrate the skin. No other anomaly was found during clinical examination.

It was just after surgical procedure that the patient reported another ongoing genital infection. The anamnesis revealed that she already feels pains at the first visit. Gynecologic examination exhibited

leucorrhea and smears and cervical biopsy during colposcopic evaluation allowed the identification of an infection with Chlamydia and a grade3 cervical intraepithelial neoplasia (CIN 3), respectively. The cystocopic evaluation and the plain thoracic radiograph revealed normal.

During the work-up, we founded hypochromic microcytic anemia with hemoglobin at a level of 96g/L. No biological inflammation was found, the renal and hepatic functions were normal. A biopsy of the oral lesion was done and the pathologic study exhibited a papilloma, with no sign of malignant disease. The HIV test was negative.

She disappeared and came again 3 months later and a complete exeresis of the lesion was done. A sub-hyoid pediculated flap was made but did not work. The pathologic study identified a squamous cells carcinoma; but with no lymph nodes invasion.

A multidisciplinary approach, including ENT practitioners, gynecologists, cancerologists and radiotherapists, was instituted because of the different therapeutic challenges. HPV-induced cancers are known to be sensitive to chemotherapy and radiotherapy but the optimal chemotherapy sequencing needed to be determined. Also, the dependency or inter-dependency between the oral site and the vaginal one should be established. Finally, the implications of the infection and / or pre-cancerous status of the immunity system were also unknown and also, the lack of resources in order to support the treatment.

In presence of a limit margins with no perineural and no lymph nodes invasion, the multidisciplinary consensus was exeresis of vaginal lesion by a conization and radiotherapy in the oral site, as high as 50 grays, divided in 25 sessions of 2 grays. The management was no eventful, as did the early post-management periods.

The patient is currently in good health and no relapse occurred after a follow-up period of 30 months. She will continue to attend regular visits, currently every 6 months.

Fig-1: Granular tumor in the internal aspect of the cheek

Fig-2: Pediculated flap (sub-hyoid) collection

Fig-3: Final operative aspect after flap positioning

DISCUSSION

HPV-induced carcinomas are constantly and significantly rising all over the world [1, 2, 7]. As shown by the case presented here, the rising occurs even in countries like our, in which the US and traditions may represent an efficient barrier to its spreading. But the world is changing and, also, some social realities (divorced woman with no resources) have to be taken into account.

The usual presentation of the disease as an exophytic mass with pain or not, is observed in the case we presented here. Some authors have reported that in such circumstances and with a positive history, the identification of a genital infection is of tremendous importance. Moreover, among the others classical criteria of oral HPV-related carcinomas, we have: 1) a direct relationship between a viral infection in the genital apparatus and the presence of an oral HPV-infection; 2) sexual intercourse at a young age; 3) multiple sexual partners; 4) no condom use; 5) oral sex [8, 9]. All those criteria were present in the case we are reporting here. But at this level, a lack in initial evaluation is noticeable because gynecologic exam did not exhibited vaginal signs and that the patient has concealed her embarrassment.

The correct diagnosis of the disease requires a reliable tissue specimen for the pathologic study. That means the biopsic specimen must be with the basal membrane of the epithelium and that only the pathologic study can gives the correct final diagnosis [9].

Initially we diagnosed a papilloma and finally, after more than 4 months, we retained the final correct diagnosis of squamous cells carcinoma. Nevertheless, we don't really know if it was effectively initially a papilloma ongoing a transformation as carcinoma at the time we made the biopsy and if this latter would have induced a more progressive disease. Also, the potential relationship and/or interference with the vaginal site of the HPV should be under high suspicion but, because of logistic resources (no genetic test available) remained with no longer evaluation. The literature minimally address this issue as no definitive proof exists confirming that the pathologic factors advocated in our current discussion are capable to alter the natural history of the disease with a more rapid progression.

The frequency of oral HPV infection in women with a cervical HPV infection has been studied. Published studies have detected widely-ranging prevalence estimates, from 2.6% to 50%; they also have yielded conflicting results regarding the rate of women presenting the same HPV type at two mucosal sites, as detected in 0–60% of cases [10]. No study has been done for the frequency of HPV-induced oral carcinoma with cervical infection and/or gynecologic precancerous states.

The management represents another challenge we needed to face. Although surgery represents the first line therapeutic option in cases of oral cancer with localized dissemination, the other modalities that should integrate therapy in order to optimize the final results are not well defined, and even one knows that they include radiotherapy and chemotherapy [11].

Moreover, our patient presented with 2 HPV infection complications in the same time, which means that we are facing a morbid process that is very aggressive and/or with an altered immune status.

If it is well known that surgery is the modality of choice in cases with local dissemination, on the other hand, the modalities that should be added to surgery in those circumstances are not well defined even though

we know that chemotherapy and radiotherapy are effective [12]. Also, the fact that our patient presented with oral carcinoma and vaginal pre-cancerous lesion favors the idea of a progressive morbid process that is aggressive and / or alteration of the immunity system despite the negativity of the HIV test.

The literature addressing oral HPV-induced carcinoma shows the possibility of poor results in the circumstances of treatment without chemotherapy (only radiotherapy) or with radiotherapy either in presence of a concomitant infection with the herpes simplex virus or when the carcinoma have been induced by a low risk HPV. Our patient was with no resources to support chemotherapy treatment [13].

CONCLUSION

Malignant transformation of a papilloma of the oral cavity is a rare event that needs, when co-existing with genital precancerous disease, the precision of the immune status. The management of such a case requires a multidisciplinary approach. A key issue in oral HPV infection remains whether it can develop from a genital HPV infection, through oral and genital contact or by self-inoculation, or whether it can be considered an independent event.

REFERENCES

1. Ferlay J, Soerjomataram I, Dikshit R, Eser S, Mathers C, Rebelo M, Parkin DM, Forman D, Bray F. Cancer incidence and mortality worldwide: sources, methods and major patterns in GLOBOCAN 2012. International journal of cancer. 2015 Mar 1;136(5).
2. Kreimer AR, Clifford GM, Boyle P, Franceschi S. Human papillomavirus types in head and neck squamous cell carcinomas worldwide: a systematic review. Cancer Epidemiology and Prevention Biomarkers. 2005 Feb 1;14(2):467-75.
3. Syrjänen K, Syrjänen S. Detection of human papillomavirus in sinonasal carcinoma: systematic review and meta-analysis. Human pathology. 2013 Jun 1;44(6):983-91.
4. Alan H, Agacayak S, Kavak G, Ozcan A. Verrucous carcinoma and squamous cell papilloma of the oral cavity: Report of two cases and review of literature. European journal of dentistry. 2015 Jul;9(3):453.
5. Babaji P, Singh V, Chaurasia VR, Masamatti VS, Sharma AM. Squamous papilloma of the hard palate. Indian journal of dentistry. 2014 Oct;5(4):211.
6. D'souza G, Kreimer AR, Viscidi R, Pawlita M, Fakhry C, Koch WM, Westra WH, Gillison ML. Case–control study of human papillomavirus and oropharyngeal cancer. New England Journal of Medicine. 2007 May 10;356(19):1944-56.
7. Hunter KD, Parkinson EK, Harrison PR. Profiling early head and neck cancer. Nature Reviews Cancer. 2005 Feb;5(2):127.
8. Ferlay J, Steliarova-Foucher E, Lortet-Tieulent J, Rosso S, Coebergh JW, Comber H, Forman D, Bray F. Cancer incidence and mortality patterns in Europe: estimates for 40 countries in 2012. European journal of cancer. 2013 Apr 1;49(6):1374-403.
9. Ford PJ, Farah CS. Early detection and diagnosis of oral cancer: Strategies for improvement. Journal of Cancer Policy. 2013 Mar 1;1(1):e2-7.
10. Termine N, Giovannelli L, Matranga D, Caleca MP, Bellavia C, Perino A, Campisi G. Oral human papillomavirus infection in women with cervical HPV infection: new data from an Italian cohort and a metanalysis of the literature. Oral oncology. 2011 Apr 1;47(4):244-50.
11. Tribius S, Ihloff AS, Rieckmann T, Petersen C, Hoffmann M. Impact of HPV status on treatment of squamous cell cancer of the oropharynx: what we know and what we need to know. Cancer letters. 2011 May 28;304(2):71-9.
12. Mydlarz WK, Chan JY, Richmon JD. The role of surgery for HPV-associated head and neck cancer. Oral oncology. 2015 Apr 1;51(4):305-13.
13. Rautava J, Kuuskoski J, Syrjänen K, Grenman R, Syrjänen S. HPV genotypes and their prognostic significance in head and neck squamous cell carcinomas. Journal of Clinical Virology. 2012 Feb 1;53(2):116-20.