

Recurrent Nasal Sebaceous Carcinoma in Human Immunodeficiency Virus/ Hepatitis B Virus (HIV/HBV) Coinfection Patient: A Case Report

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Received July 28, 2015; Revised September 01, 2015; Accepted September 14, 2015

Abstract Background: Human Immunodeficiency Virus (HIV) since the first case was reported is recognized as a major risk factor for development of different types of malignancies, Sebaceous carcinoma is a rare and aggressive form of cutaneous carcinoma and very rare in HIV Patients. Method: A case report and literature review of 46 years old male, known to have HIV/HBV coinfection presented with a history of four months of gradual growth Nasal mass. Result: Excisional biopsy performed for the nasal mass and histopathology examination showed sebaceous cell carcinoma, Surgical removal of the nasal mass was done and nasal reconstruction with right paramedian forehead flap plus full thickness skin graft taken from the abdomen for reconstruction of the inner nose also was done, after two years patient came back with recurrent at same site. Conclusion: sebaceous cell carcinoma is an extremely rare in HIV patients, but should be considers for any skin tumor in HIV patient, follow up also needed for the risk of recurrent.

Keywords: nasal, sebaceous carcinoma, HIV, HBV

Cite This Article: Adel Alothman, and Hythum Salah H. Mohamed, "Recurrent Nasal Sebaceous Carcinoma in Human Immunodeficiency Virus/ Hepatitis B Virus (HIV/HBV) Coinfection Patient: A Case Report." *American Journal of Medical Case Reports*, vol. 3, no. 10 (2015): 329-332. doi: 10.12691/ajmcr-3-10-7.

1. Introduction

People infected with Human Immunodeficiency Virus (HIV) have a high risk for developing different types of malignancies like skin and non-skin cancers [2,3,16], despite the Acquired Immune Deficiency Syndrome (AIDS) defining cancers like Kaposi sarcoma are more common [17] a recent studies showed increased risk of non -AIDS defining cancers like skin cancers [2] Sebaceous carcinoma is a rare, aggressive, malignant tumor derived from the adnexal epithelium of sebaceous glands. It may arise in ocular or extra ocular sites and exhibits such a variety of histologic growth patterns and diverse clinical presentations that the diagnosis is often delayed for months to years [18].

There is very rare reported cases of Sebaceous carcinoma in HIV patients in literature, three cases were reported, two occurred in the Eye and one in the Mandible [13,15], we will report case of 46 years old man, known to have HIV/HBV coinfection presented with a nasal mass, histopathology examination showed sebaceous cell carcinoma and Sinus Computed tomography scan (Figure 1) showed superficial mass lesion measure 3.5 x 4.2 cm in the right side of the face invading to the adjacent right anterior nasal nostril, up to our knowledge and literature review our case is probably the first case reported for nasal Sebaceous carcinoma in HIV patient and HIV/HBV coinfection patient.

2. Case Report

A 46 years old male, known to have HIV/HBV coinfection since two years ago, presented with a history of right side nasal mass for four months, which increase gradually in size, associated with mild and intermittent bleeding and ulceration, on examination there was a red – brown fungating mass, about 4 x 5 cm arise from the ala of the right side of the nose, outer surface is firm and lobulated, there was no bleeding and also no head or cervical lymphadenopathy found, patient denied any history of previous heavy Sun exposure or radiation in form of radiotherapy.

Excisional biopsy performed for the nasal mass and histopathology examination showed sebaceous cell carcinoma of intermediate grade, medial skin margin and cheek margins were free of carcinoma, Sinus Computed tomography scan (Figure 1) showed superficial mass lesion measure 3.5 x 4.2 cm in the right side of the face invading to the adjacent right anterior nasal nostril, but no deep subcutaneous extension or bony destruction, right maxillary sinus is partially opacified associated with occluded right ostiomeatal complex, the left ostiomeatal complex is patent, other para nasal sinuses are clear, also colonoscopy and brain Computed tomography scan were free of metastasis, also brain Magnetic resonance imaging showed soft tissue lesion on the right side of the nose with slight extension to the anteroinferior right nasal cavity

with no deep extension, brain parenchyma with in normal, no metastases (Figure 2).



Figure 1. Computed tomography sca showed superficial mass lesion measure 3.5 x 4.2 cm in the right side of the face invading to the adjacent right anterior nasal nostril

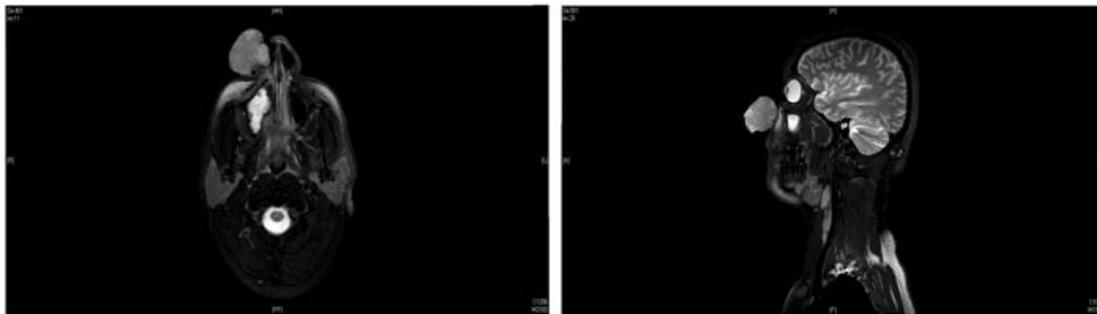


Figure 2. Magnetic resonance imaging showed soft tissue lesion on the right side of the nose with slight extension to the anterioinferior right nasal cavity with no deep extension, brain parenchyma with in normal, no metastases



Figure 3. about 1 x 1 cm mass on the tip of the nose, also there is nasal and forehead scars of the previous reconstruction Surgery

Surgical removal of the nasal mass was done and nasal reconstruction with right paramedian forehead flap plus full thickness skin graft taken from the abdomen for reconstruction of the inner nose was done also, after

surgery patient observed in a hospital for short period and discharged in a good condition.

After two years patient came back again with complaint of anew small gradual growing mass on the tip of the nose for one month without bleeding, pain or ulcer, on examination there was about 1 x 1 cm mass on the tip of the nose, not ulcerated and no bleeding, also there was nasal and forehead scars of the previous reconstruction Surgery (Figure 3), excisional biopsy performed for the new nasal mass and histopathology examination showed infiltrating sheets of sebaceous gland consistent with recurrence of sebaceous cell carcinoma and patient is planed again for Surgery

3. Discussion

Since recognition of human immunodeficiency virus (HIV) in the 1980s, several studies have shown that infected patients are at increased risk for developing skin and epithelial tumors [1] recent reports also have suggested an increased risk for developing skin cancers [2] and these tumors may be more aggressive and tend to occur in younger than usual age-groups [3]. This association between skin cancer and HIV infection specially in patients who developed Acquired Immune Deficiency Syndrome (AIDS) is well known [4]. Neoplasms seem to grow more rapidly and be more invasive in patients with AIDS than in other groups of patients, several oncogenic factors, for example, sunlight exposure or human papilloma virus infection have been associated with the development of skin cancer in these patients [4], other factors also like race, advanced age, reduced DNA repair capability, and immunosuppression also fair skin are associated with increased risk of malignancies [5,6,7], also the morbidity and mortality rates of skin cancer are higher in patients infected with the Human Immunodeficiency Virus (HIV) than in the general population [4].

Cutaneous cancers are the most common malignant neoplasms in the general population, little data exist among HIV positive persons, especially regarding the impact of HIV specific factors. Cutaneous neoplasms are the most common malignancies in the United States, with 70% to 80% diagnosed as basal cell carcinoma (BCC), followed by squamous cell carcinoma (SCC) and malignant melanoma (MM) [8,9,10], in one study Six percent of HIV infected persons (n = 254) developed a cutaneous malignancy during 33760 person-years of follow-up (mean, 7.5 years). Since the advent of highly active antiretroviral therapy (HAART), the incidence rates of cutaneous non-AIDS-defining cancers, in particular basal cell carcinoma, have exceeded the rates of cutaneous AIDS-defining cancers such as Kaposi sarcoma [11].

Sebaceous carcinoma is a rare and aggressive form of cutaneous carcinoma [12] It is prognosis is much worse than those of most cutaneous malignancies except for malignant melanoma due to local recurrences and distant metastases [19] it is a rare adnexal tumor usually classified into two categories: ocular and extra ocular, It frequently appears on the ocular region, particularly on the eyelids, in 75% of the cases; however it can occur in other body parts, as well, extra ocular tumors correspond roughly to a quarter of all cases and are mostly located on

the head and neck areas, which have larger quantities of sebaceous glands [13] Ocular Sebaceous carcinoma is considered to have a poorer prognosis as they usually present with metastases [19], our patient he developed tumor in the nasal site which is not reported site in HIV patient before [13,15]. The incidence of extra ocular Sebaceous adenocarcinoma is higher in men, occurring commonly during the seventh decade of life [13]. In one study a series of 1349 patients who were identified with Sebaceous cell carcinoma, 54% were men, 86.2% were white, and 5.5% were of Asian/Pacific Islander ancestry, the median age at diagnosis was 73 years [12]. The most frequent site of disease was the eyelid (38.7%), the population-matched 5- and 10-year age-matched relative survival rate was 91.9% (standard error [SE], 1.9%) and 79.2% (SE, 3.7%), respectively, cause of death was attributable to cancer in 31% of patients [12]. Orbital involvement did not predict for worsened survival compared with no orbital involvement (5-year overall survival, 75.2% vs 68%, respectively), the overall population-matched rate of sebaceous carcinoma was highest in whites (2.03 cases per 1000, 000; SE, 0.08) versus Asian/Pacific Islanders (1.07 per 1000, 000; SE, 0.18; P=.0001) versus blacks (0.48 per 1,000,000; SE, 0.11; P<.0001) [14].

Notably, HIV infected individuals have a markedly elevated risk for sebaceous carcinoma [14], but there are very rare reported case of sebaceous carcinoma, three cases were reported [13,15], it reported in 36-year-old woman with right Eyelid mass and incisional biopsy showed the lesion to be sebaceous cell carcinoma, she underwent Mohs' micrographic excision of the lesion, followed by reconstruction of a full-thickness eyelid defect with a tarsoconjunctival flap and a myocutaneous advancement flap and five months follow up showed no recurrence, and also another reported case of 34-year man noticed a yellow caruncular mass in the right Eye, an excisional biopsy was performed; histopathologic examination showed sebaceous cell carcinoma [15] also another case was reported in 42 years old man known to have HIV presented with an asymptomatic facial mass on the right mandibular region tissue obtained from the excisional biopsy was stained with hematoxiline eosine (HE) and revealed an ulcerated neoplasm, formed by stacks of basaloid cells with eosinophilic cytoplasm, centered by a population of cells with micro vacuolated cytoplasm and irregular, hyperchromic nuclei with mitotic Figures and necrotic areas, characteristics consistent with Sebaceous adenocarcinoma [13], no recurrent was reported of sebaceous carcinoma HIV patients [13,15], our patient came with recurrent of malignancy, also no Nasal sebaceous cell carcinoma in HIV and HIV/HBV coinfection patient was reported in literature up to our knowledge [13,15], our patient may be the first case reported of Nasal sebaceous cell carcinoma in HIV and in HIV/HBV coinfection patient.

4. Conclusion

Sebaceous cell carcinoma is a very rare in HIV patient, but should be considers for any skin tumor in HIV patient, follow up also needed for the risk of recurrent.

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