International Journal of Medical Case Reports
2023; 2(4): 24-27
http://www.sciencepublishinggroup.com/j/ijmcr
doi: 10.11648/j.ijmcr.20230204.11
ISSN: 2994-7049 (Online)

Case Report

Cutaneous Kaposi Sarcoma Indicative of HIV/AIDS Infection: Two Cases Report and Review of the Literature at Regional Hospital Centre of Niamey (Niger)

Kadri Sani[1], Harouna Amadou Mahaman Laouali[2], Djibrilla Almoustapha Amadou[4], Garba Abdoul Azize[3], Salifou Ibrahim Alkassoum[4], Daou Mamane[4]

[1]Internal Medicine Unit, Regional Hospital Centre of Niamey, Niamey, Niger

[2]Infectious Diseases Unit, Faculty of Health Sciences, Dan Dicko Dan Koulodo University, Maradi, Niger

[3]Internal Medicine Unit, Zinder National Hospital, Faculty of Health Sciences, University of Zinder, Zinder, Niger

[4]Internal Medicine Unit, Faculty of Health Sciences, ABDOU Moumouni Niamey University, Niamey, Niger

Email address:

tmik12@yahoo.fr (Kadri Sani), malaha55@yahoo.fr (Harouna Amadou Mahaman Laouali), daoum@yahoo.fr (Daou Mamane)

To cite this article:

Kadri Sani, Harouna Amadou Mahaman Laouali, Djibrilla Almoustapha Amadou, Garba Abdoul Azize, Salifou Ibrahim Alkassoum et al. (2023). Cutaneous Kaposi Sarcoma Indicative of HIV/AIDS Infection: Two Cases Report and Review of the Literature at Regional Hospital Centre of Niamey (Niger). *International Journal of Medical Case Reports*, *2*(4), 24-27. https://doi.org/10.11648/j.ijmcr.20230204.11

Received: October 25, 2023; **Accepted**: November 21, 2023; **Published**: November 29, 2023

Abstract: Kaposi sarcoma (KS), first described in 1872 by the dermatologist Moricz Cohen Kaposi, is the most common neoplasm of people living with HIV today. Kaposi Sarcoma remains the most common cancer in people living with HIV in sub-Saharan Africa, where it causes significant morbidity and mortality. We report the case of two patients from Niger, aged 43 and 65 years old, who consulted unit of HIV care the Niamey Regional Hospital for an exploration of skin lesions in a context of altered general condition including significant weight loss. The clinical diagnosis of Kaposi's disease on a background of HIV immunodeficiency was retained. The clinical lesions were infiltrating cuteneous bluish nodular skin lesions with macules located on the legs, forearm and abdomen. The treatment consisted in putting the patients on high antiretroviral treatment followed by courses of chemotherapy. The combination of high antiretroviral therapy was started with TDF-3TC-EFV one tablet daily at bedtime. These study show the clinical polymorphism, the diagnostic delay and the treatment including polychemotherapy and antiretroviral drugs. Early diagnosis and detection of lesions could improve management and the prognosis of this disease.

Keywords: Cutaneous Kaposi's Disease, HIV/AIDS Disease, ART CHR/Niamey Niger

1. Introduction

Kaposi sarcoma (KS), first described in 1872 by the dermatologist Moricz Cohen Kaposi, is the most common neoplasm of people living with HIV today. Despite a decline in incidence since the introduction of combination anti-retroviral therapy, KS remains the most common cancer in people living with HIV in sub-Saharan Africa, where it causes significant morbidity and mortality. It has become an AIDS-classifying condition. It is the most frequent malignant tumor in HIV-infected individuals [2, 5-7]. Its development is related to infection with human herpes virus 8 (HHV-8) [1, 4-8]. We report the case of two patients with cutaneous MK revealing HIV infection.

2. Cases Report

Case 1

We report the case of a 43-year-old female patient, without any particular pathological history, who consulted for an alteration of the general stage in a context of important weight loss amounting to 10% of her weight in one month. On clinical examination, blue-reddish nodular skin lesions were found on the legs, feet and intergluteal folds. These lesions are

infiltrating and poorly limited (Figure 1). No oropharyngeal, genital or ocular involvement is noted. Elsewhere, there are no digestive, respiratory, cardiac or urinary signs. The biological examination shows a slight biological inflammatory syndrome with a positive CRP, an accelerated VS, a hyperleukocytosis at 12000/µL, a normochromic normocytic anemia at 10 g/dL. These skin lesions described above allowed us to evoke the diagnosis of Kaposi's disease. The retroviral serology performed came back positive for HIV 1 with a CD4 T-cells count of 255 cells /mm^3 and viral load at 25000 copies /mm^3. Chest X-ray, abdominal and pelvic ultrasound and esophageal microscopy were normal. In view of these skin lesions and the positive HIV retroviral serology, we retained the clinical diagnosis of epidemic Kaposi's disease associated with AIDS.

Case 2

The second case is the case of a 65-year-old patient with no known pathological history who was admitted for prolonged fever in a context of altered general condition and severe anemia.

The clinical examination revealed a cachexia patient with infiltrating bluish nodular skin lesions with macules on the legs, forearm and abdomen (Figure 2). No involvement of the oral and anal mucosa.

Elsewhere, there was no oral mycosis, no peripheral adenopathy on palpation, no hepatomegaly or splenomegaly.

The biological examinations showed severe anemia at 6.3 g/dL microcytic without hyperleukocytosis, an accelerated sedimentation rate greater than 100 mm at 1, CRP at 84 mg/L, HIV retroviral serology was positive with a CD4 T-cells count at 91cells /mm^3 and viral load at 263000 /mm^3, Chest X-ray and abdominal ultrasound were normal.

HHV8 serology and skin biopsy were not performed for both patients due to lack of adequate technical facilities.

A pre-treatment assessment within the framework of the Niger initiative for access to antiretroviral treatment (INAARV) was carried out to start patients on antiretroviral treatment and adjuvant multidrug therapy. The combination of high antiretroviral therapy was started with TDF-3TC-EFV one tablet daily at bedtime.

Figure 1. *Nodular lesions bilateral on leggs and fee.*

Figure 2. *Skin lesions on the legs, feet and intergluteal folds.*

Figure 3. *Nodular lesions on legs and feet.*

Figure 4. *Abdominal skin lesions as plaques.*

Figure 5. *Abdominal and legs skin lesions.*

3. Discussion

Kaposi's disease in its epidemic form is one of the diseases that revealed the human immunodeficiency associated with HIV in the early 1980s [7]. It occurs in immunocompromised patients or those on long-term immunosuppressive therapy [2, 5]. It is more aggressive than classical Kaposi's disease, with more ubiquitous skin, mucosal and visceral involvement, and can rapidly lead to death [1]. African endemic KS, the most rapidly fatal subtype, is further classified into the subgroups of nodular, florid, infiltrative, and lymphadenopathic.

There is a high incidence among sub-Saharan Africans of up to 10% annually, and this subtype may account for up to 9% of all cancers in the region. The basic lesions are progressively infiltrating macules, erythematous and purplish plaques. These lesions do not disappear with in vitro pressure and often take on an ecchymosis, hemorrhagic or pigmented appearance. Angiomatous nodules with a hard consistency or more rarely, lymphangiectatic nodules with a soft consistency may be associated or observed in isolation [3-5, 7, 8]. Lymphedema may accompany the lesions or even be in the foreground [11-17]. The lesions are usually bilateral, predominating in the extremities, especially the lower limbs [3]. We started the treatment with antiretroviral drugs before chemotherapy with bleomycin, as many other authors have done [2-18, 19, 20, 23]. Remission of lesions was achieved after 24 weeks of chemotherapy, concomitant with antiretroviral therapy. Immune deficiency plays a role in the pathogenesis of this condition, and this remission would probably be attributed to triple antiretroviral therapy, which is likely to lead to the restoration of an immune response capable of controlling HHV8 replication [20-23].

4. Conclusions

Our study allowed us to make a double diagnosis despite a limited technical platform. Thus the diagnosis of HIV infection is made from Kaposi's disease, which classify AIDS stage. The case reports its clinical polymorphism, the diagnostic delay and the treatment including polychemotherapy and antiretroviral drugs. Early diagnosis and detection of lesions could improve management and the prognosis of this disease.

Acknowledgments

Special thanks to all patients living with HIV by participating to this study and all staff of HIV unit of Regional Hospital of Niamey.

Conflicts of Interest

The authors declare no conflicts of interest.

References

[1] Hanae Bouzidi, Salim Gallouj, Sanae Krich, et Fatima Zahra Mernissi Classic Kaposi disease with adrenal involvement: a new case The Pan Africa Medical Journal- ISSN1937-8688. African Field Epidemiology Network.

[2] B. Saka, A. Mouhari-Toure, I. M. Wateba, S. Akakpo, K. Kombaté, A. Balaka, A. Sogan, K. O. Afolabi, P. Pitché, K Tchangaï-Walla, Maladie de Kaposi associée au VIH: 103 observations en dermatologie à Lomé (Togo). Médecine et santé tropicale, Janvier-Février-Mars 2013 Volume 23, numéro 1.

[3] Ndiaye Maodo, Diop Assane, Berthe Siritio, Diallo Moussa, Mjahed Sara Diatta Boubacar Ahy, Diadie Saer, Seck Ndeye Bougoul, Diallo Salimatou, Ndiaye Mame Tene, Niang Suzanne Oumou, Ly Fatimata, Dieng Mame Thierno, Kane Assane, MALADIE DE KAPOSI ENDEMIQUE A DAKAR: ETUDE DE 29 CAS.

[4] C. Francès, C. Lebbé, La maladie de Kaposi*:* La Lettre du Cancérologue - septembre 2010 • Vol. XIX - n° 7.

[5] Mouna Lamchahab, Bouchra Oukkache, Sofia Marouan, Asmae Quessar, Said Benchekroun, Maladie de kaposi compliquant une aplasie médullaire Pan Afr Med J. 2014; 18: 169.

[6] Martellotta F, Berretta M, Vaccher E, Schioppa O, Zanet E, Tirelli U. AIDS-related Kaposi's sarcoma: state of the art and therapeutic strategies. Curr HIV Res. 2009; 7 (6): 634–8.

[7] P. Philibert, L. Chiche, F. Retornez, M. Delord, S. Rebaudet, C. Stavris, S. Cailleres, J. Allemand, H. Kihri, P. Halfon Sarcome de Kaposi associé au VIH: à propos d'un cas illustrant le caractère protecteur des inhibiteurs de protéase du VIH. La Revue de Médecine Interne Volume 38, Supplement 1, June 2017, Pages A220-A221.

[8] PILLY E. Collège des universitaires de maladies infectieuses et tropicales. In: Pilly E, editor. Infection à VIH et sida. Vivactis plus Ed; 2006. p. 494.

[9] Kristina Narančić-Skorić, Hrvoje Brajčić, Mirjana Sabljar-Matovinović, Tajana Filipec-Kanižaj, Maruška Marušić-Vrsalović, Mladen Knotek, Ingrid Prkačin, Dinko Škegro, Slavko Gašparov. Classic Kaposi's Sarcoma: A Case Report. Acta Dermatovenerol Croat 2005; 13 (1) 22-27.

[10] Jiasen Wang, BA, Holly Reid, MD, Natasha Klimas, MD, and Misha Koshelev, Houston, Texas. An unusual series of patients with Kaposi sarcoma. JAAD Case Reports 2019; 5: 646-9.

[11] Shehzeen Fatima Memon_, Anosh Aslam Khan_, Yasir Ahmad Khan_ and Hafsa Mahmood. Classic Kaposi's Sarcoma in an exclusively cutaneous exhibition. International Journal of Medical Reviews and Case Reports (2019) 3 (9): 620-623.

[12] David Sandoval Sanchez, Estanislao Antonio Calixto, Roberto Peralta Juárez, Marcos, García Aranda, Rolando Castellanos Villalobos, Jessica Ariatna Carreto Navarrete. Extensive Kaposi's sarcoma in a Patient with Acquired Immunodeficiency Syndrome: Case International. Journal of Medical Science and Clinical Research Studies, Report Volume 03 Issue 01 Janaury 2023 Page No: 68-70. DOI: https://doi.org/10.47191/ijmscrs/v3-i1-14

[13] Ujjwal Joshi, Denny E Ceena, Ravikiran Ongole, KN Sumanth, Karen Boaz, K Jeena Priya, N Srikant. AIDS Related Kaposi's Sarcoma presenting with Palatal and Eyelid Nodule. JAPI july 2012 VOL. 60.

[14] Mudau A, Makhanya NZ, Suleman FE. Disseminated Kaposi sarcoma presenting in unusual locations: A case report. S Afr J Rad. 2017; 21 (2), a1260. https:// doi.org/10.4102/sajr. v21i2.1260

[15] Oana Radu; Liron Pantanowitz. Kaposi Sarcoma. Arch Pathol Lab Med—Vol 137, February 2013. P 289-294.

[16] Darung I, Shah N, Ghosh A, Kamgo L, Kavishwar V. Classic Kaposi sarcoma in Eastern India. Indian J Dermatol Venereol Leprol doi: 10.25259/IJDVL_942_2021.

[17] Akca Hanife Merve, A Case of Neglected Classıc Kaposı's Sarcoma. J Clin Med Img Case Rep. 2022; 2 (2): 1106.

[18] Kiran Alam, Veena Maheshwari, Manoranjan Varshney, Mehar Aziz, Mohammad Shahid, Mahfooz Basha, Kavita Gaur. Unusual presentation of more common disease/injury Kaposi sarcoma presenting as dermal nodule. *BMJ Case Reports* 2011; doi: 10.1136/bcr.01.2011.3789.

[19] Konrad Wroński1, Przemysław Stefaniak, Zbigniew Masłowski, Leszek Frąckowiak. Cutaneous Kaposi sarcoma–case report. New Med 2015; 19 (3): 92-93 DOI: 10.5604/14270994.1179841.

[20] Ana Isabel Teixeira, Miguel Neno, Robert Badura, João Borges-Costa, Paulo Leal Filipe. Kaposi Sarcoma of the eyelid as an initial manifestation of AIDS. Dermatology Online Journal 22 (7): 12.

[21] La Ferla L, Pinzone MR, Nunnari G, Martellotta F, Lleshi A, Tirelli U, De Paoli P, Berretta M, Cacopardo B. Kaposi' s sarcoma in HIV-positive patients: the state of art in the HAART-era. Eur Rev Med Pharmacol Sci. 17 (17): 2354-65 2013 [PMID 24065230].

[22] Agaba P, Sule H, Ojoh R et al. Poor immune status and systemic disease are independently associated with mortality in AIDS-related Kaposi Sarcoma in Nigeria. Infect Agents Cancer. 7 (Suppl 1): P7, 2012 [PMC3330062].

[23] Di Lorenzo G, Konstantinopoulos PA, Pantanowitz L, Di Trolio R, De Placido S, Dezube BJ, Management of AIDS-related Kaposi's sarcoma, Lancet Oncol. 8 (2): 167-76, 2007 [PMID 17267331].