

# Steroid Induced Kaposi's Sarcoma in an HIV Negative Patient

Farshad Abbasi, MD  
Soolmaz Korooni Fardkhani,  
MD  
Minosh Sha'bani, MD

Department of Infections Diseases, Shahid  
Beheshti Medical University, Tehran, Iran

*Corresponding author:*

Farhad Abbasi MD

Department of Infectious Diseases,  
Labafinejad Hospital, Shaheed Besheshti  
Medical University, Tehran, Iran.

Email: f\_abbas@yahoo.com

Received: April 26, 2007

Accepted: August 10, 2008

## Abstract

Kaposi's sarcoma is one of malignancies that is most seen in HIV positive or immunocompromised patients. Kaposi's sarcoma typically involves the skin. We present a HIV negative, 31-year-old Iranian woman from Tehran with Kaposi's sarcoma associated with corticosteroid use. (*Iran J Dermatol 2008;11: 171-172*)

**Keywords:** Kaposi's sarcoma, corticosteroid, dexamethasone

## Introduction

Kaposi's sarcoma is a malignancy associated with immune deficiency. Kaposi's sarcoma involves the skin and manifests as a lesion that enlarges from patches to plaques and nodules. These lesions are violaceous in the beginning but later evolve into brown.<sup>1</sup>

## Case Report

The patient, a 31-year-old Iranian woman from Tehran, presented with a small violaceous flat lesion in her right leg (figure 1) which was first noticed 6 months ago. It had gradually enlarged and was nodulated. The patient was HIV negative and no background of immune deficiency was detected in her past medical history except for systemic corticosteroid use. The patient had a cushing-like face and purple striae were detected in her abdomen and back (figure 2). The patient had self-administered 8 mg of intramuscular dDexamethasone 3 to 7 times a week without a physician's prescription due to knee pain. Skin biopsy was done and pathological evaluation confirmed Kaposi's sarcoma.

## Discussion

Kaposi's sarcoma (KS) was first described in 1877 by Moritz Kaposi.<sup>2</sup>In 1994, Polymerase Chain

Reaction (PCR) showed DNA of Human Herpes Virus 8 (HHV-8) in Kaposi's sarcoma lesions.<sup>1</sup>

KS typically involves the skin and manifests as lesions that enlarge from patches to plaques and nodules. The highly vascular nature of KS gives it its purple color.<sup>1</sup> It is known that immunosuppressive therapy increase the risk of KS.<sup>2</sup>

Four variants of KS occur that are epidemiologically and clinically different.

Classic KS occurs in elderly men involving the skin of lower extremities and is indolent. Endemic KS occurs in Sub-Saharan Africa.

Epidemic KS refers to KS in HIV infected individuals, is aggressive, and involves skin, gastrointestinal and respiratory tract. Iatrogenic KS occurs in individuals who are immunosuppressed because of organ transplantation and tends to be aggressive.<sup>1</sup> Iatrogenic KS due to systemic steroid therapy has also been reported.<sup>3, 4</sup> KS has been seen in rheumatological diseases following low-dose corticosteroid therapy.<sup>5</sup>

There are several reports of KS associated with intra-articular injection of steroid<sup>6,7</sup> and even reactivation of KS with topical use of steroid.<sup>8</sup> Our patient developed KS due to systemic use of Dexamethasone. She had used 3 to 7 intramuscular injections of Dexamethasone every week as a pain reliever for a period of two months. After diagnosis by biopsy, corticosteroid was discontinued and the patient was referred for radiotherapy.



**Figure 1:** Flat violaceous plaque on right leg



**Figure 2:** Purple striae on abdomen due to corticosteroid use

## References

1. Kaye MK. Kaposi's sarcoma- associated herpes virus. In: Mandell GL, Bennett JE, Dplin R (eds). Principles and practice of infectious diseases. Philadelphia: Elsevier 2005:1827-32.
2. Gonzalez – Sixto B, Conde A, Mayo E, et al. Kaposi's sarcoma associated with systemic corticosteroid therapy. Actas Dermosifiliogr 2007;98:553-5.
3. Joo M, Soon lee S, Jin Rark H, Shin HS. Iatrogenic Kaposi's sarcoma following steroid therapy for nonspecific interstitial pneumonia with HHV-8 genotyping. Pathol Res Pract 2006;202:113-7.
4. Monti M, Mancini LL, Ceriari R, et al. Iatrogenic Kaposi's sarcoma and HCV infection. J Eur Acad Dermatol Venereal 2004;18:191-3.
5. Vincent T, Moss K, Colake B, Venables PJ. Kaposi's sarcoma in two patient following low dose corticosteroid treatment for rheumatological disease. Rheumatol 2000;39:1294-6.
6. Burnet SP, Mc Neil JD. Kaposi's sarcoma in an elderly patient with rheumatoid arthritis after intra-articular corticosteroid. Rheumatol 2002;41:107-8.
7. Trattner A, Hodak E, David M, et al. Kaposi's sarcoma with visceral involvement after intra-articular and epidural injection of corticosteroids. J Am Acad Dermatol 1993;29:890-4.
8. Perez E, Barnadas MA, Garcia-Patos V, et al. Kaposi's sarcoma in a patient with erythroblastopenia and thymoma: reactivation after topical corticosteroid. Dermatol 1998;197:264-7