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Editöre Mektup / Letter to the Editor

AKCİĞER VE BÖBREK KANSERİ İLE İLİŞKİLİ PARANEOPLASTİK KUTANÖZ LÖKOSİTOKLASTİK VASKÜLİT

PARANEOPLASTİC CUTANEOUS LEUKOCYTOCLASTIC VASCULITIS ASSOCIATED WITH LUNG AND RENAL CANCER

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Dear Editor,

The term cutaneous leukocytoclastic vasculitis(CLV) includes a wide and heterogeneous spectrum of syndromes clinically characterized by predominant involvement of the skin, with histopathologic findings that have in common vascular inflammation and blood vessel damage (1,2). CLV causative factors or associated diseases are usually drugs, infection, or collagen vascular disease, but rarely malignancies (3). CLV may also be associated with malignancy and may behave as a paraneoplastic syndrome. CLV may antedate the discovery of the malignancy, coincide with it, occur after the malignancy has already been recognized, or provide a clue to a recurrence (4).

Herein we describe two cases of CLV leading to the discovery of an as yet asymptomatic, surgically curable renal cell carcinoma and metastatic lung adenocarcinoma.

A 60-year-old man, presented with purpuric lesions on his lower extremities and forearms(Figure 1A). The erythrocyte sedimentation rate was 68 mm/h, the blood count was normal and urinalysis was remarkable for microhematuria. The urine sediment was normal. Skin biopsy demonstrated a leukocytoclastic vasculitis. Antinuclear antibodies, cryoglobulin, cANCA, pANCA, HBsAg, antiHBsAb and antiHIVAb were negative. The serum levels of C3, C4 were normal. Computed tomography imaging of the abdomen revealed a heterogeneous exophytic nodular lesion in the lower pole of the left kidney(Figure 1B). No metastasis was detected. The patient underwent nephron-sparing surgery and the pathological examination of the mass revealed clear cell type renal cell carcinoma(RCC). The vasculitic skin lesions disappeared twenty day after the surgery and the patient is in good health at one-year follow-up.

A 66-year-old male presented palpable purpuric lesions on his lower extremities(Figure 2A). He had smoked 1.5 packs of cigarettes a day for the past 30 years. The patient had lost an average of 7 kilos in the last 3 months and positive for a productive cough and dyspnea on exertion. This revealed an erythrocyte sedimentation rate of 50 mm/h, C-reactive protein of 12 mg/dL(0-5), and negative tests for antinuclear antibodies, cANCA, pANCA and cryoglobulins. A biopsy of the rash showed findings characteristic of lukocytoclastic vasculitis.Chest computed tomography showed a nodule measuring 25 mm × 18 mm in the left upper lobe (Figure 2B). He had been diagnosed with stage stage T2aN3M1a (grade IV) adenocarcinoma with no genomic mutations. The combination chemotherapy of cisplatin and paclitaxel every 3 weeks was administered for six cycles. The vasculitic skin lesions disappeared 2 week after the first chemotherapy.

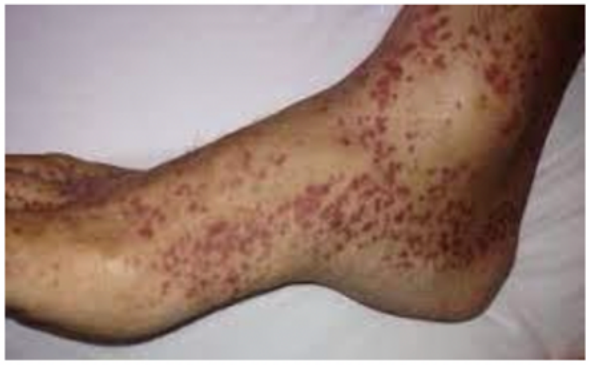

Figure 1. Petechial lesions and palpable purpura on the right foot

LCV is also related to malignant processes usually discovered in various solid tumors as well as hematologic malignancies (5). The actual proportion of malignancy in patients with cutaneous vasculitis remains unknown. Current information on paraneoplastic vasculitis has been generally retrieved from data of relatively small series or from case reports based on a few patients (6). A reported a frequency

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of associated malignancy of 8% of patients from a series of individuals with cutaneous vasculitis (2). Several possible

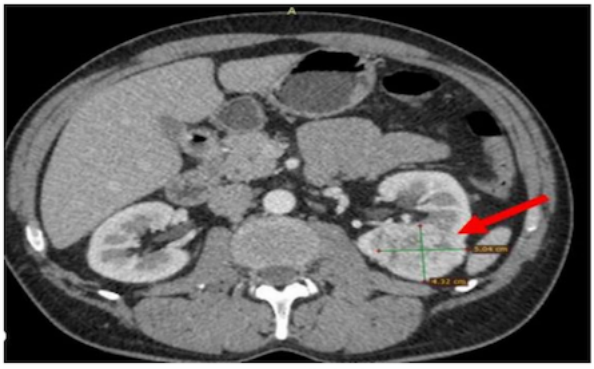

Figure 2. Exophytic nodular lesion, measuring 4.3x5 cm

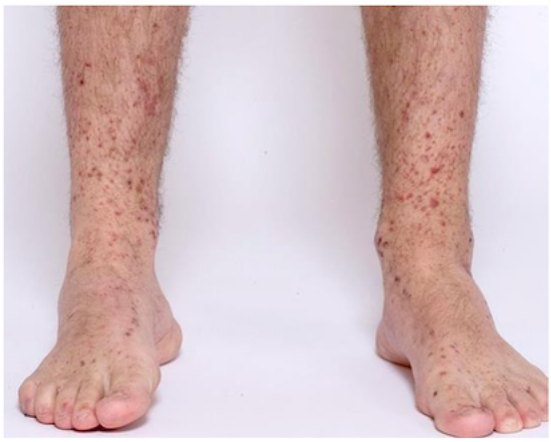

Figure 3. Petechial lesions and palpable purpura on the lower legs

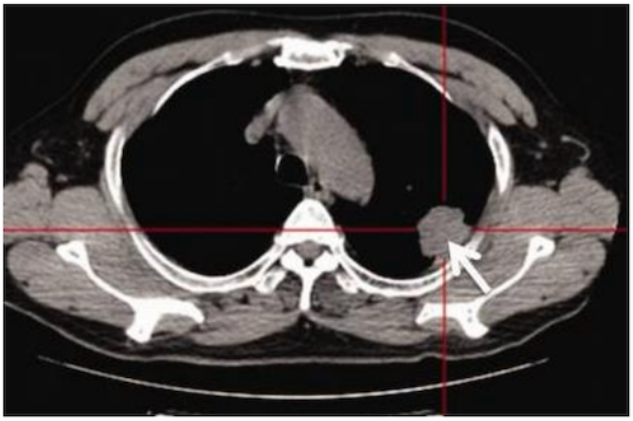

Figure 4. CT revealed a nodul in the upper lung lobe

mechanisms for the development of paraneoplastic vasculitis have previously been suggested (2,3): 1) impaired clearance of normally produced immune complexes, 2) abnormal production of immunoglobulins that would react either to vascular antigens causing formation of in situ immune complexes or to a circulating antigen forming circulating immune complexes that then deposit in the vessel walls, and finally, 3) production of immunoglobulins directed to not only the abnormal tumor cells but also the normal endothelium. Several studies have recommended guidelines for vasculitis manifesting as the paraneoplastic process: a temporal relationship, a consistent clinical course and a poor response to conventional therapy for vasculitis (5). Accordingly, we suggested that the patient's cutaneous manifestations were derived from the primary malignancy. In our cases, the skin lesions disappeared after the surgery for RCC in the first case and after the first cycle of chemotherapy for lung adenocarcinoma in the second case. This suggests that the cutaneous manifestations were related to the primary malignancy. Treatment and prognosis of paraneoplastic vasculitis is generally related to the underlying neoplasm. We reported two cases of early malignancy detection based on skin markers makes early introduction of surgical/oncologic therapy possible. Thus, the skin lesions regressed and the patients avoided multiple visits to different specialists without a definitive diagnosis and the increased costs and resource utilization for the healthcare system.

In conclusion, clinicians should be aware of the potential association between cutaneous vasculitis and neoplasm. These cases illustrate that CLV can be a manifestation of occult malignancy and prompt diagnosis and treatment of the underlying cancer can lead to resolution of the CLV.

Informed Consent: The patient signed an informed consent form.

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REFERENCES

1. Zehnder P, Jenni W, Aeschlimann AG. Systemic vasculitis and solid tumors (epitheliomas). Rev Rheum Engl Ed. 1998; 65:442.
2. Gibson LE, Su D. Cutaneous vasculitis. Rheum Dis Clin North Am. 1998; 21: 1097Y1113.
3. Calabrese LH. Michel BA, Fauci AS, et al. The American College of Rheumatology 1990 criteria for the classification of hypersensitivity vasculitis. Arthritis Rheum. 1990;33:1108Y1113.
4. Fortin PR. Vasculitides associated with malignancy. Curr Opin Rheumatol. 1996; 8:30Y33
5. Wick M.R., Patterson J-W. Cutaneous paraneoplastic syndromes. Semin Diagn Pathol. 2019; 36:211–28.
6. Loricera J, Calvo-Río, Blanco, R. et al. The spectrum of paraneoplastic cutaneous vasculitis in a defined population: incidence and clinical features. Medicine, 2013; 92: 331.