CASE REPORT

Lupus Erythematosus in an Orthodontic Patient

NICK ROMANIDES, DMD
RICHARD D. MARULLI, DMD

Lupus erythematosus (LE) is a connective-tissue disorder that affects more than 1.5 million people in the United States.[1-5] Ninety percent of these are young-to-middle-age women.

The clinical course of LE is marked by periods of remission and exacerbation. It is of particular interest to dentists that LE patients are unusually prone to clotting abnormalities, infection, mucocutaneous disease, and endocarditis.

Five different forms of LE are currently recognized:

- Systemic lupus erythematosus (SLE)
- Neonatal lupus erythematosus (NLE)
- Chronic cutaneous lupus erythematosus (CCLE)
- Subacute cutaneous lupus erythematosus (SCLE)
- Drug-induced lupus erythematosus

CCLE and SCLE are primarily dermatological diseases that are restricted to the skin and oral mucosa.

Patient History and Diagnosis

A 20-year-old female was referred for orthodontic treatment by her general dentist. She is a medical assistant, and on her medical history indicated that she had SLE.

Upon questioning, the patient said she was sick with SLE six years earlier. She had petechiae on her legs for two months, was hospitalized three times, experienced hair loss, exhibited Raynaud's phenomenon, and developed mild arthritis. She had a positive antinuclear antibody and tested false positive for syphilis.

The patient was given prednisone for 18 months, and her lupus profile became negative for three months. She was not taking any medication at the time she presented for orthodontic treatment.

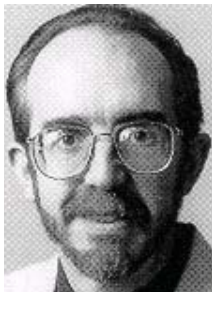
Clinical examination revealed a Class I skeletal and dental malocclusion with maxillary spacing and mandibular anterior crowding. The patient's periodontal condition was excellent. Full orthodontic records were taken, and a treatment plan was presented.

Orthodontic Treatment

Brackets were bonded in both arches on a Thursday. The following Monday, the patient came in for an emergency appointment. She exhibited severe intraoral lesions and leukoplakia on the buccal and labial mucosa and the tongue (Fig. 1).

The patient said she had been experiencing headaches and neck pain for the previous four days. On Saturday, she had had a fever, vertigo, nausea, and a brief fainting episode. She had gone to the emergency room, where the physician had prescribed PEN V-K four times

Dr. Romanides



Dr. Marulli

Dr. Romanides is in the private practice of orthodontics at 7608 Bergenline Ave., North Bergen, NJ 07047. Dr. Marulli is a Clinical Assistant Professor, Department of Orthodontics, New Jersey Dental School, University of Medicine & Dentistry of New Jersey, and in the private practice of orthodontics in Edison, NJ.

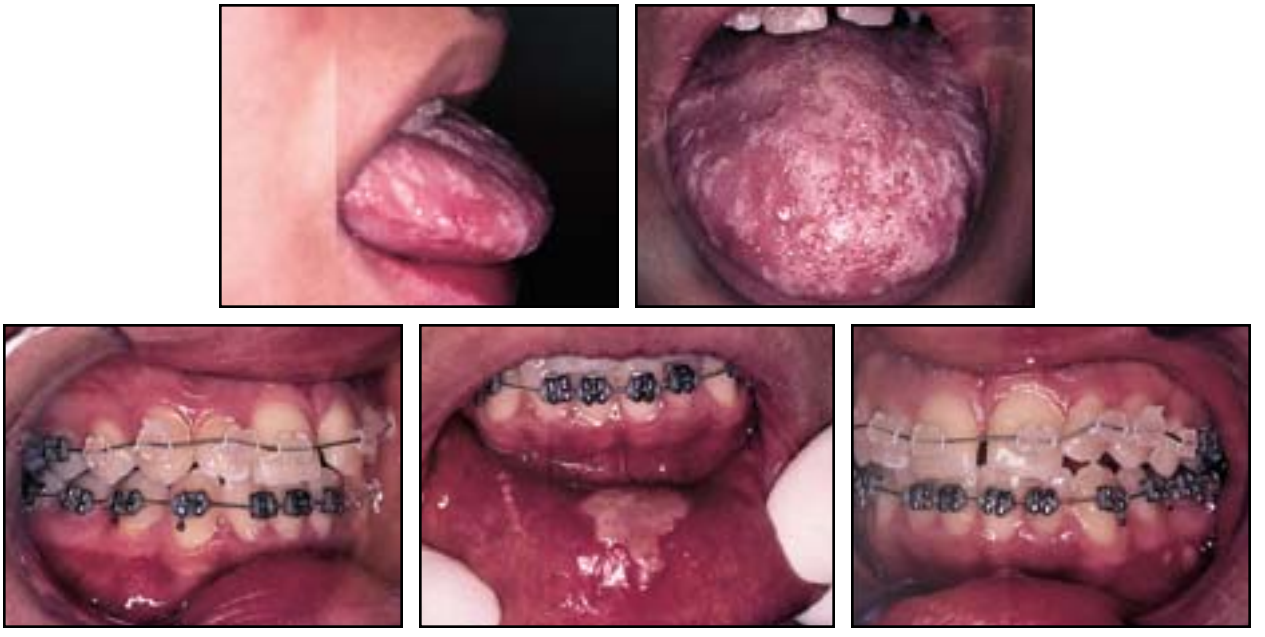


Fig. 1 Patient with lupus erythematosus, showing severe intraoral lesions and leukoplakia on mucosa and tongue.

daily and Tylenol with codeine. During the four days after bracket placement, she was on a liquid diet due to extreme pain during mastication. On Monday morning, she had felt dizzy and "blacked out".

After a consultation with an oral surgeon, the patient was given viscous Xylocaine, a topical anesthetic (Kenalog in Orabase). She was referred to her physician, who placed her in the hospital the next day for intravenous steroid therapy. The brackets were removed in the hospital on the physician's recommendation.

This treatment was successful, and final composite removal and polishing were performed 10 days later in the orthodontic office.

Conclusion

It is clear from this case that orthodontists need to be able to identify LE patients and understand the oral manifestations of the disorder. Any patient with a history of SLE should be referred to a rheumatologist before orthodontic treatment is begun, and supportive steroid and antibiotic therapy should be prescribed even if the patient's current lupus profile is negative.

REFERENCES

1. De Rossi, S. and Glick, M.: Lupus erythematosus: Considerations for dentistry, J. Am. Dent. Assoc. 129:330-339, 1998.
2. Naparstek, Y. and Plotz, P.H.: The role of autoantibodies in autoimmune disease, Ann. Rev. Immunol. 11:79-104, 1993.
3. Petri, M.: Clinical features of systemic lupus erythematosus, Curr. Opin. Rheumatol. 7:395-401, 1995.
4. Gladman, D.D.: Prognosis and treatment of systemic lupus erythematosus, Curr. Opin. Rheumatol. 7:402-408, 1995.
5. Hochberg, M.C. and Petri, M.: Clinical features of systemic lupus erythematosus, Curr. Opin. Rheumatol. 5:575-586, 1993.