



The total solution in autoimmunity.™

Chronic Ulcerative Stomatitis

Chronic ulcerative stomatitis (CUS) is a rare mucocutaneous disease that primarily involves mucosal surfaces and occasionally the skin. CUS is characterized by the presence of oral erosive or ulcerative lesions that display unique direct and indirect immunofluorescence patterns. CUS is typically a disease of middle-aged women. About 14% of CUS cases exhibit concurrent, biopsy-proven, cutaneous lichen planus.

Clinical Features

- Clinical lesions in CUS are characterized by the presence of atrophic or erosive lesions of the oral mucosa that heal without scarring and display alternating periods of exacerbation and remission
- The tongue is the most common site of CUS lesions, followed by the buccal mucosa and the gingival tissues (may resemble desquamative gingivitis)

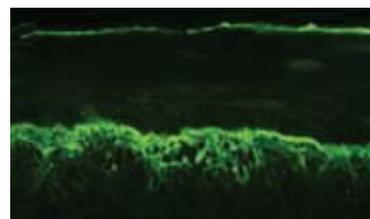
Diagnosis

Diagnosis is based on:

- H & E Studies
- Direct immunofluorescence (IF) studies
- Serum antibody tests for antinuclear antibodies in stratified squamous epithelium

Why choose Immco Diagnostics?

- Immco was co-founded by periodontists
- Over 40 years experience providing specialized Oral and Maxillofacial pathology biopsy services
- Board certified oral and immuno pathologists
- Accuracy and reliability
- Consultations and second opinions
- More than 100 published articles on autoimmune mediated periodontal diseases
- Lab report within 48 hours of sample receipt via fax, mail or **Immco Online**, a HIPAA-compliant web tool



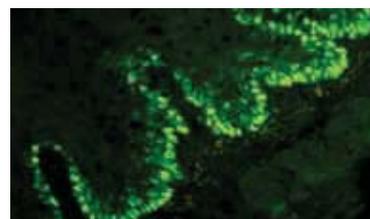
Direct IF: Lesional and perilesional oral mucosal and skin specimens reveals shaggy fibrillar fibrin deposits at the basement membrane zone (BMZ).



Indirect IF: Pattern on monkey esophagus



Direct IF: Speckled, finely granular pattern of immunoglobulin G (IgG) deposition in the nuclei of keratinocytes



Indirect IF: Pattern on guinea pig esophagus

Optimal biopsy Site for direct immunofluorescence testing:

Tissue	Site	Special Considerations
Oral Mucosa	Take biopsy from the lesion	None

Treatment

Because CUS may be refractory to treatment with topical steroids, distinguishing CUS from other oral chronic ulcerative conditions is important. In some cases a favorable clinical response is achieved with hydroxychloroquine treatment.

Immco Tests

Code Description

510 Direct Immunofluorescence
 Routine panel tests for the presence of IgG, IgA, IgM, Fibrin, C3 plus C5b-9 and/or IgG4, depending on diagnosis.
CPT Code: 88346(x6 or x7)
Turnaround Time: Report availability is within 48 hours from the time of specimen receipt.
Biopsy Site Selection: Proper biopsy sites are dependent on the suspected diagnosis. Refer to Immco Diagnostics Reference Manual at www.immco.com.

Code Description

107 Stratified Epithelium Specific Antinuclear Antibody (SES-ANA)
Methodology: Indirect Immunofluorescence (IFA).
Substrate: Hep-2, Primate Esophagus, Guinea Pig Esophagus
Reference Range: Based upon selective reactions on substrates used in the differential assay.
CPT Code: 86038, 86255(x2)
Schedule/Turnaround Time: Assay performed daily Mon.-Fri. Report availability is within 48 hours from the time of specimen receipt.
Specimen Requirements: Specimen need not be refrigerated or frozen. Collect 5-10 ml of blood in a red top or serum separator tube. If possible, separate serum from clot and place into orange tube provided with Immco collection kits. If separation facilities are not available, the blood can be sent in the tube used for collection.

Selected References

- Carlson MW, Garlick JA, Solomon LW. Chronic ulcerative stomatitis: evidence of autoimmunity pathogenesis. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod.* 2011;111(6):742-8.
- Solomon LW. Chronic ulcerative stomatitis. *Oral Dis* 2008;14:383-9.
- Solomon LW, Aguirre A, Neiders M, Costales-Spindler A, Jividen GJ Jr, Zwick MG, Kumar V. Chronic ulcerative stomatitis: clinical, histopathologic, and immunopathologic findings. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod.* 2003;96:718-26.
- Jaremko WM, Beutner EH, Kumar V. et al. Chronic ulcerative stomatitis associated with a specific immunologic marker. *J Am Acad Dermatol.* 1990;22:215-20.

Sample Submission

Specimen collection kits are available free of charge. Please call 1.800.537.8378 or e-mail laboratoryservices@immco.com for supplies.

Use appropriate tube(s) as follows:

Immunofluorescence:

- Lesional biopsyRed tube
- Normal biopsyPurple tube

H&E biopsyGreen tube

Serology.....Orange tube

Specimen can be shipped by courier services, U.S. Postal service and overnight carriers free of charge. Results are reported within two business days of the receipt of the specimen via mail, fax and through Immco online, a HIPAA-compliant web tool at www.immco.com.



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For details about our products and services, please contact laboratoryservices@immco.com.

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