Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.
Painful Oral Ulcers and A Rash in A Middle-Aged Female
Karen Clarke, MD, MS, MPH. Division of Hospital Medicine, Department of Medicine

Case presentation: The patient is a 47 y.o. female with a history of hypertension who presented to the emergency department (ED) for evaluation of a progressively worsening rash. The rash started one week ago on her chest, and then spread to her abdomen, back, and inner thighs. She reported that small blisters would form, and these would pop and drain when she scratched them. She denied using any new medications or lotions.

She also reported having significant odynophagia for 12 to 18 months, due to the presence of painful oral ulcers. This had led to a weight loss of 50 pounds during this time interval. An extensive outpatient work up (which included testing for systemic lupus erythematosus and other autoimmune diseases) had been unrevealing. The oral ulcers had not responded to treatment with low dose prednisone, methotrexate, or dapsone.

Initial vital signs were T 36.6, BP 158/108, HR 70, RR 19, and room air oxygen saturation level 96 percent. Shallow erosions were noted on her buccal mucosa and gingiva. Her intregumentary exam was remarkable for the presence of numerous shallow erosions (most of them scabbed) on her trunk, arms, and legs. Blalanced bullae were present on her abdomen and back.

The dermatology service was consulted, and they suspected that the patient had an autoimmune blistering disease. A punch biopsy was obtained from one of the lesions on her abdominal wall, and the pathology results showed suprabasilar epidermal acantholysis. The indirect immunofluorescence/ELISA results were positive for anti-desmoglein-1 and anti-desmoglein-3. These results were consistent with a diagnosis of pemphigus vulgaris. Subsequently, intravenous methylprednisolone was started, and she also received one dose of rituximab. Within a few days, an improvement in her oral ulcers and skin lesions was noted. The patient was discharged on prednisone 80 mg daily, and arrangements were made for outpatient follow-up in the Dermatology Clinic.

Discussion: Pemphigus vulgaris is a life-threatening autoimmune blistering disease that is associated with acantholysis (disruption of keratinocyte to keratinocyte adhesion). This leads to the development of intraepithelial vesicles in the skin and mucous membranes. It typically occurs in adults, who are between 40 to 60 years of age. The factors that precipitate the onset of pemphigus vulgaris are not well understood, but both environmental and genetic factors may play role. Also, in some instances the use of certain medications (most commonly thiols) can precipitate pemphigus vulgaris. Systemic corticosteroids are the mainstay of treatment for pemphigus vulgaris. In order to reduce the dose of steroids that is required to treat this disease, immunomodulatory drugs such as rituximab, mycophenolate mofetil, or azathioprine may be added to the patient’s medical regimen.

Conclusion: Pemphigus vulgaris is a severe blistering disorder, for which treatment is always warranted. Once the diagnosis has been confirmed by skin biopsy and immunofluorescence assays, then systemic steroids in conjunction with immunomodulatory drugs can be initiated for effective disease management.

https://doi.org/10.1016/j.jnma.2020.09.056

Rheumatic Disease Patients with COVID-19 Diagnosis
Edward L. Treadwell, MD. Professor of Medicine/Rheumatology-Immunology, Department of Internal Medicine, Brody School of Medicine-East Carolina University

Clinical care and therapeutic challenges in the COVID-19 ERA continue to evolve and present new opportunities for all health care providers. In early evaluation of rheumatic disease patients in select medical centers, it was found that select patients with autoimmune diseases including rheumatoid arthritis, systemic lupus erythematosus, polymyalgia rheumatica, spondylarthritides and others who were admitted with COLVID-19 diagnosis required more intensive care and had greater mortality than other non-rheumatic COVID-19 patients. The objectives of this year 2020 NMA Rheumatology Symposium is to Provide an early update and review for rheumatology care and therapies for patients with autoimmune diseases in the COLVID-19 pandemic ERA and review early analysis of rheumatic disease patients with the COLVID-19 diagnosis.

https://doi.org/10.1016/j.jnma.2020.09.057

HIV-HCV Co-infection and Liver Disease: Improving Clinical Outcomes in High Risk Populations
Marie L. Borum, MD, EdD, MPH. Professor of Medicine, Director of Division of Gastroenterology and Liver Diseases, George Washington University, Washington, D.C.

The intersection between HIV and hepatitis C (HCV) epidemics has significant clinical implications and raises challenging issues for patients and health care providers. In the United States, it is estimated >4 million individuals have chronic HCV and that ~25% of those who are HIV positive are infected with hepatitis C. Individuals who are co-infected with HIV and HCV have a greater risk for developing advanced liver disease. Potential etiologies for development of liver disease include cellular immune responses, HIV associated immune activation, activation of hepatic stellate cells, HIV apoptosis and HIV associated pro-inflammatory cytokines.

HIV-HCV co-infected individuals have accelerated rates of hepatic fibrosis, higher risk of hepatic decompensation, higher rates of hepatocellular carcinoma and a high rate of mortality from liver disease. Individuals who develop hepatic decompensation have a median survival of 13-16 months. Hepatocellular carcinoma has an 8-fold higher rate of occurrence in HIV-HCV co-infected individuals compared to those who are HCV mono-infected.

Factors that accelerate hepatic disease include older age, diabetes, alcohol use, high body mass index and steatosis. A CD4 count <200 and / or HIV viremia are associated with more rapid advancement of hepatic fibrosis. As HIV-related mortality has declined, the mortality from HCV has increased. Death rates from HCV have surpassed death rates from HIV. It is critical that all individuals with HIV are tested for HCV. Advancement in HCV treatment has resulted in eradication of HCV in approximately 94-98% HIV-HCV co-infected individuals. Treatment of chronic hepatitis C is critical to improve clinical outcomes.

https://doi.org/10.1016/j.jnma.2020.09.058

Recent Developments in Amyloidosis
Maria M. Picken, MD. Loyola University Medical Center, Chicago

Amyloidoses are a rare and heterogeneous group of disorders associated with the deposition of abnormally folded proteins in tissues, leading to organ damage. Current classification of amyloidoses is based on the amyloid protein type. While many proteins can be potentially amyloidogenic in humans, in clinical practice, it is critical to distinguish between treatable versus non-treatable diseases as well as those with a genetic component. Light chain amyloidosis (AL) continues to be the most common amyloid diagnosis in the developed world, other clinically significant types include AA amyloidosis associated with chronic inflammatory states, ALECT2 (Iexotoxic chymotactic factor 2 amyloidosis) and ATTR (transthyretin amyloidosis).

AL can be associated with multiple myeloma (MM) or, more often, with an underlying plasma cell dyscrasia. As HIV-related mortality has declined, the mortality from HCV has increased. Death rates from HCV have surpassed death rates from HIV. It is critical that all individuals with HIV are tested for HCV. Advancement in HCV treatment has resulted in eradication of HCV in approximately 94-98% HIV-HCV co-infected individuals. Treatment of chronic hepatitis C is critical to improve clinical outcomes.

https://doi.org/10.1016/j.jnma.2020.09.059