**Mucous Membrane Pemphigoid**
By Amanda Vera
Oral Pathology 2017
Section: Tuesday AM

 **Overview**
 Mucous Membrane Pemphigoid (MMP) is a rare persistent autoimmune disorder distinguished by “sub epithelial blistering diseases that largely affect the mucous membranes.” MMP primarily affects the oral mucosa but it can also impact on the ocular mucosa followed by the involvement of the skin, nasal cavity, pharynx, larynx, and esophagus. Patients with MMP will present with pain, blistering lesions that can leave scarring which can potentially lead to serious complications, and peeling of the mucosa. MMP does not have a remedial treatment but the goal as an oral health care provider is to mange and control MMP from progressing.

**Etiology**

Mucous Membrane Pemphigoid is a chronic autoimmune disorder that results from the “binding of autoantibodies to target antigens in the epithelial basement membrane. This interaction triggers a complement-mediated response in which inflammatory cells are recruited, resulting in a destructive inflammatory process that detaches the epithelial layer from the basement membrane. Although the exact mechanisms of MMP are not fully understood, evidence suggests a role of autoimmunity against specific antigens and genetic role has also been suggested for MMP.” (*Journal California Dental Association)*

**Clinical Presentation**
 A patient who presents with Mucous Membrane Pemphigoid will have symptoms of pain, dysphagia and difficulty eating. In addition the patient will have clinical signs affecting the oral mucosa which include blister formation that can rupture and result in ulceration, mucosal sloughing of the tissue, erythematous gingiva that bleeds easily, as well as present with desquamative gingivitis and mucosal scarring. A patient who has MMP may also have ocular symptoms and present with conjunctivitis, burning, irritation, and excessive tearing. MMP can become very dangerous when mucosal scarring occurs and can result in severe consequences. In the ocular mucosa MMP can cause blindness due to symblepharon, and in the esophagus and larynx scarring can lead to stenosis and strictures.

**Demographic**
 Mucous Membrane Pemphigoid usually affects the population aged 60 to 80 years old and is found more prevalent in females.

**Biopsy / Histology / Radiographs**

Mucous Membrane Pemphigoid is diagnosed by the clinical presentation, routine histopathology examination and immunofluorescence analysis. A biopsy is very crucial in this process to help accurately diagnose MMP. A histopathology examination will show a “sub epithelial split and inflammatory infiltrate comprised of eosinophils, neutrophils, and lymphocytes. A immunofluorescence analysis of the mucosa will reveal “linear deposition of igG, C3, or less commonly IgA along the basement membrane. (*Journal California Dental Association)*

**Differential Diagnosis** Mucous Membrane Pemphigoid could reasonable be mistaken for other pemphigoid disorders (bullous pemphigoid and pemphigoid gestationis), Dermatitis herpetiformis, pemphigus, epidermolysis, acquisita, bullous systemic lupus erythematous and erythema multiforme. That it is why biopsy is very crucial in accurately diagnosing MMP.

**Treatment**
 Mucous Membrane Pemphigoid does not have a remedial treatment but the treatment goal is to control and manage MMP depending on the specific areas of the body that is affected and the severity of the disease. A patient who is diagnosed with Mucous Membrane Pemphigoid will most likely utilize a topical intralesional or systemic “immunomodulating agent” (corticosteroids, dapsone, minocycline, mycophenolate, azathioprine, mofetil, cyclophosphamide, tumor necrosis factor-alpha inhibitors, colchicine, and rituximab) these medications help control ulcer and scar formation, reduce inflammatory response and symptoms.

**Prognosis**
 Early diagnosis of Mucous Membrane Pemphigoid is very crucial for the patient due to the disease being very difficult to treat depending on the areas of involvement, clinical severity, and the progression of the disease. “Prevention of scarring and cicatrization is of utmost importance in the treatment of MMP.” A patient who is diagnosed with MMP must have the appropriate medical team of specialists to make sure the patient is educated on the disease as well as taking the right precautions when taking the proper medications for the control of MMP. The patient should routinely see an oral health care provider because it is significant for the patient to be monitored for candidiasis, and oral hygiene home care instruction should be provided to the patient to cause less injury to the mucosa when the disease is flaring. A patient should also be under the care of an ophthalmologist as the disease may progress and cause ulceration to the eye and eventually lead to blindness if not treated. (Neff, A., Turner, M., & Mutasim, D.)

**Professional Relevance** Although Mucous Membrane Pemphigoid is a rare chronic autoimmune disease, as a Dental Hygienist is our responsibility and obligation to have a generalized knowledge of diseases and lesion that a patient may present to us with. As a Dental Hygienist it is our commitment to be able to teach our patients how to properly maintain an optimal oral cavity when presenting with this disease because the patient may have difficulty in maintaining appropriate oral hygiene. As a Dental Hygienist we follow certain core values that we should always respect when it comes to treating our patients. Four major core values that should be considered when assessing patients are *societal trust, veracity, beneficience, and non-maleficience.* As a Dental Hygienist and being part of the dental team it is very crucial to screen our patients and when a patient presents with clinical features to ask the patient questions on whether they are aware of these lesions and if they have done anything for it. As a Dental Hygienist I am accountable and have the obligation of making sure I fully inform the patient of my findings as well as give the patient referrals to an ophthalmologist and a dermatologist to evaluate for mucosal involvement beyond the oral cavity.

**Bibliography**

Patel, S., DMD, MPH, Kumar, S., DDS, MDsc, MS, Laudenbach, J. M., DMD, & Teruel, A., DDS, MS PHD. (september 2016). Mucocutaneous Diseases: Oral Lichen Planus, Mucous Membrane Pemphigoid and Pemphigus Vulgaris. *Journal California Dental Association*. CDA JOURNAL, VOL 4 4 , Nº 9

Neff, A., Turner, M., & Mutasim, D. (2008). Treatment strategies in mucous membrane pemphigoid. *Therapeutics and Clinical Risk Management,* *4*(3), 617-626.

Singla, I., Sheikh, S., Pallagatti, S., & Gupta, D. (n.d.). Mucous Membrane Pemphigoid – A Case Report. Retrieved December 01, 2017, from http://www.jpmsonline.com/jpms-vol7-issue3-pages36-38-cr-html.html