



AUTOIMMUNE BULLOUS DISEASES

THE DIAGNOSIS OF MUCOUS MEMBRANE PEMPHIGOID: INVESTIGATION OF ALTERNATIVE TOOLS

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Introduction: Mucous membrane pemphigoid (MMP) encompasses a heterogeneous group of autoimmune bullous diseases, in which IgG autoantibodies target different adhesion molecules at the basement membrane zone (BMZ). MMP affects mainly mucous membranes at the orifice, including the oral mucosa and the conjunctiva. Direct immunofluorescence (DIF) is the gold standard for the diagnosis, showing linear deposits of IgG, IgA and C3 along the BMZ; however performing a biopsy in certain anatomical sites, such as the conjunctiva, might be challenging, carrying a potential risk of serious complications. Serological investigations, including indirect immunofluorescence test (IIF), show a poorer sensitivity compared to DIF, due to the low titer of circulating autoantibodies.

Objectives: to evaluate the usefulness of DIF on non-lesional skin and IIF on human healthy skin (HHS) and normal oral mucosa (NOM) in the diagnosis of MMP.

Materials and Methods: A cross-sectional study was conducted on 22 patients, 17 enrolled retrospectively and 5 prospectively, diagnosed with MMP according to DIF on perilesional mucosa. For the 5 patients enrolled prospectively, DIF was also performed on healthy skin from the retroauricular area. IIF was performed on HHS and NOM as a substrate, in addition to that on monkey esophagus.

Results: Compared to IIF on monkey esophagus, which was positive for 2 out of 22 patients (9.1%), IIF on HHS showed linear deposits of IgG along the BMZ in 16 out of 18 patients (88.8%). Interestingly, IIF on NOM was negative in all the cases. DIF on retroauricular skin was positive in all the 5 tested patients (100%).

Conclusion: Although DIF on perilesional mucosa remains the gold standard for the diagnosis, DIF on healthy skin may be considered when MMP occurs in not easily accessible anatomical sites. IIF on HHS may conversely be considered as an alternative to IIF on monkey esophagus.

