Extended Abstract

Effectiveness of Topical Application of Heterologous Platelet Rich Plasma (PRP) in Oral Mucous Membrane Pemphigoid. A Report of a Case [†]

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1. Introduction

Mucous membrane pemphigoid (MMP) is a rare, predominantly mucosal subepithelial blistering disorder triggered by autoantibody reactivity to several basement membrane antigens including BP180, BP230, laminin 332, and type VII collagen. Disease control is usually achieved with steroids and mycophenolate mofetil, azathioprine, or dapsone. However, long term use of steroids is well known to expose the patient to the risk of moderate to severe side effects.[1] For this reason, the use of alternative therapies or corticosteroid sparing agents to control disease is highly attractive[1,2]. In the present paper we describe the management of a case of mucous membrane pemphigoid treated with topical application of heterologous PRP.

2. Case Report

A 35 years old female patient affected by oral MMP and non-respondent to initial treatment with local corticosteroids was selected for heterologous PRP- based compassionate treatment with the intention to avoid systemic steroid and immunosuppressant administration. The Pemphigus Disease Area Index (PDAI) was used to assess clinical disease activity before and after treatment. Pain level changes were assessed through VAS scale from 0 to 10. Periodontal plaque index(FMPS) and bleeding on probing(FMBS) indexes were also collected to assess any improvements in periodontal situation before and after treatment. Patient underwent 7 topical applications of heterologous PRP and endpoint for clinical evaluation was set, approximately 1 month following the last session. No clinical side effects were recorded. PDAI values improved from 10 to 3. VAS score, which was reported to be 6/10 at the beginning of treatment (main complaint included the impossibility to eat crispy or hard food due to pain exacerbation and gingival bleeding) dropped to 2/10 at re-examination. Before treatment, levels of FMBS scored 30% but decreased to 9% at the end of PRP. Similarly, FMPS levels scored 26% at the beginning of treatment and dropped to 6% at the end of treatment.

3. Conclusions

Within the limits of a case report, topical applications of heterologous PRP seems to be a safe procedure for the management of patients with oral mucous membrane pemphigoid. In our case, regenerative and immunomodulatory properties of PRP achieved not only a significant improvement in both signs and symptoms of diseases but also a better control of periodontal inflammation. PRP topical application is an attractive therapeutic option to be studied at larger scale as adjunctive steroid sparing treatment for MMP.

References

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