



AUTOIMMUNE BULLOUS DISEASES

COMPARISON OF DIRECT IMMUNOFLUORESCENCE OF PLUCKED HAIR AND SKIN FOR EVALUATION OF IMMUNOLOGICAL REMISSION IN PEMPHIGUS

Manu Vidhya Harikumar⁽¹⁾ - Reena Rai⁽²⁾

Sri Ramachandra Institute Of Medical Sciences And Research, Department Of Dermatology, Chennai, India⁽¹⁾ - Psg Institute Of Medical Sciences And Research, Department Of Dermatology, Coimbatore, India⁽²⁾

INTRODUCTION: Demonstration of intercellular deposition of IgG on cell surface of keratinocytes by direct immunofluorescence(DIF) of skin is the gold standard in diagnosis of Pemphigus. Recently, DIF of plucked hair demonstrating intercellular deposition of IgG in the outer root sheath (ORS) has shown to be useful for diagnosis, with sensitivity of 85-100%.

OBJECTIVE: To compare DIF of plucked hair and skin for evaluation of immunological remission in Pemphigus patients in clinical remission.

METHODOLOGY: 30 patients with Pemphigus Vulgaris who showed positive DIF of skin and hair at baseline were included in the study, and DIF of skin and hair was repeated after 6 months or more of clinical remission (with no new /non healing lesions). Presence of intercellular deposits of IgG and or C3 in skin and ORS of hair was considered positive.

RESULTS: Out of 30 patients, both skin and hair DIF was positive in 7, negative in 14. In 2 patients DIF of skin was positive and hair was negative. In 7 patients DIF of hair was positive and skin negative.

CONCLUSION: DIF of hair and skin correlated with each other in 21(70%) patients and sensitivity of hair DIF was 77.7% and specificity was 66.6%. However, in 7 (23.3%) patients the positivity of hair DIF in spite of skin DIF being negative cannot be disregarded. Hence, this could be a recommended additional procedure to assess immunological remission in pemphigus as it is a non-invasive and cost effective procedure.

