

COMPARISON OF DIRECT IMMUNOFLUORESCENCE OF ORAL MUCOSA AND PLUCKED HAIR IN PEMPHIGUS

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BACKGROUND:

Demonstration of intercellular deposition of IgG & C3 on cell surface of keratinocytes by direct immunofluorescence (DIF) of oral mucosa is the gold standard in diagnosis of oral Pemphigus. DIF of plucked hair demonstrating intercellular deposition of IgG in the outer root sheath (ORS) has shown to be useful, with sensitivity of 85-100%. Our objective was to compare DIF of plucked hair and oral mucosa to find a less-invasive technique for collecting a suitable substrate.

AIM:

Comparison of Direct Immunofluorescence of Oral mucosa and plucked Hair in patients with Oral Pemphigus.

METHODOLOGY:

26 patients of histologically proven Pemphigus with oral lesions and no skin lesions were taken for the study. Biopsy from oral mucosa and plucked hair from scalp was taken for DIF.

RESULTS:

Out of 26 patients, both oral mucosa and hair DIF was IgG & C3 positive in 13 (50%) and negative in 5 (19.2%).

In 2 patients (7.69%) oral mucosa was positive while hair was negative.

In 5 patients (19.2%) hair was positive while oral mucosa was negative.

On statistical analysis the p value was 0.078, hence proving that there was no statistical significance between DIF of hair and oral mucosa.

DIF of hair and skin correlated with each other in 18 patients with a positive predictive value of 86.6%.

Sensitivity of hair DIF was 68.4% and specificity was 71.4%. However, in 6(23.1%) patients the positivity of hair DIF in spite of oral mucosa being negative cannot be disregarded.

CONCLUSION:

Hence, scalp hair DIF could be a recommended procedure to diagnose oral pemphigus as it is non-invasive and cost effective.

Keywords: DIRECT IMMUNOFLUORESCENCE, Pemphigus, Oral mucosa, Scalp hair.