

PSYCHODERMATOLOGY

## DIFFERENTIAL NEUROCOGNITIVE RESPONSES TO DISGUST IN RECENTLY DIAGNOSED PSORIASIS PATIENTS

*S Moschogianis*<sup>(1)</sup> - *E Mullings*<sup>(2)</sup> - *A Bland*<sup>(2)</sup> - *S Mckie*<sup>(3)</sup> - *C.e.m Griffiths*<sup>(4)</sup> - *R Elliott*<sup>(2)</sup> - *C.e Kley*<sup>(4)</sup>

*The University Of Manchester, Manchester Centre For Dermatology Research, Faculty Of Biology, Medicine & Health, Manchester, United Kingdom*<sup>(1)</sup> - *The University Of Manchester, Neuroscience And Psychiatry Unit, Faculty Of Biology, Medicine & Health, Manchester, United Kingdom*<sup>(2)</sup> - *The University Of Manchester, Faculty Of Biology, Medicine & Health Platform Sciences, Enabling Technologies & Infrastructure, Manchester, United Kingdom*<sup>(3)</sup> - *The University Of Manchester, Salford Royal Nhs Foundation Trust, Manchester Centre For Dermatology Research, Faculty Of Biology, Medicine & Health, Manchester, United Kingdom*<sup>(4)</sup>

**Introduction:** Psoriasis is a chronic skin disease associated with significant psychological distress. The visibility of psoriasis means patients often report experiences of stigmatisation. Previous work suggests that patients may 'block out' disgusted facial expressions from others as a neurocognitive coping mechanism.

**Objectives:** Examine neurocognitive responses to facial expressions of disgust in psoriasis patients with disease duration <6 years (6YD), disease duration >10 years (10YD) and healthy controls (HCs).

**Materials and methods:** 67 patients were recruited from a tertiary psoriasis clinic; 43 patients 10YD (mean disease duration=22.3±9.9yrs); 24 patients 6YD (mean disease duration=2.9±2.0yrs) and 40 HCs. Clinical assessment included Psoriasis Area Severity Index (PASI) and Dermatology Life Quality Index (DLQI). Self-report measures included Disgust Propensity Sensitivity Scale-Revised [DPSS-R], Fear of Negative Evaluation (FNE), State Trait Anxiety Inventory (STAI) and Beck Depression Inventory (BDI). A Facial Emotions Recognition Task (FERT) assessed the ability to recognise facial expressions of disgust and aversive control emotions (fear, sadness) at several intensities.

**Results:** Higher depression (6YD:p<0.05;10YD:p<0.001) and state/trait anxiety (6YD:STAI-S p<0.001,STAI-Tp<0.01;10YD:STAI-S p<0.01,STAI-T p<0.05) were reported by 6YD and 10YD patients compared to HCs. The 6YD group showed elevated FNE and disgust sensitivity (p<0.05) compared to HCs and increased disgust propensity (p<0.05) and sensitivity (p<0.05) compared to the 10YD group. In the FERT, 6YD patients misclassified



fear and sad faces as disgust more than HCs ( $p < 0.05$ ). Psoriasis duration correlated with disgust misclassifications and disgust sensitivity scores ( $r = -0.25$   $p < 0.05$ ).

**Conclusions:** Recently diagnosed psoriasis patients identified fear and sad facial expressions as 'disgust'. This may suggest that at disease onset patients have a heightened awareness of the negative reactions of disgust from others. Consistent with previous work, this is not evident in patients with longer disease duration. Further work is required to investigate whether disease duration may be an important consideration when offering appropriate psoriasis management.

