ECNP Congress, Amsterdam: Press release

Skin symptoms may forewarn mental health risks

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Type of research: Not peer reviewed/experimental study/people

Scientists have discovered that mental health patients who have skin conditions may be more at risk of worse outcomes, including suicidality and depression. This work, which may aid in identifying at-risk patients and personalising psychiatric treatment, is presented at the ECNP meeting in Amsterdam.

The researchers looked at 481 patients with a first episode of psychosis (which is the first time an individual experiences a psychotic episode, such as loss of contact with reality, hallucinations and delusions). On testing, 14.5% were found to have dermatological symptoms (24% female, 9.8% male) such as rash, itching, photosensitivity, etc. All patients were given 4 weeks treatment with an antipsychotic and then checked for a range of mental health parameters.

Lead researcher, Dr Joaquín Galvañ (Instituto de Investigación Sanitaria Gregorio Marañón, Madrid) said:

"*After 4 weeks of follow-up, patients with a first episode of psychosis presenting with skin conditions experienced higher levels of depression and risk of suicide. We found that just 7% of the patients without the initial skin conditions had suicidal thoughts or attempts, in contrast, around 25% of the patients with initial skin conditions had suicidal thoughts or attempts. Initial skin conditions are also linked to greater depression and poorer well-being at follow-up.*

This discovery suggests that the presence of skin conditions indicates that these patients are more at risk for worse outcomes than patients who do not have skin conditions after a first episode of psychosis".

The researchers note that, if confirmed, this finding has the potential to act as an advance marker for mental health risk, similar to the way, a blood test might indicate a greater risk of cancer or heart disease.

The brain and the skin both derive from the same embryonic origin – the ectoderm – prompting the researchers to investigate the relation between the skin and mental health.

Dr Galvañ continued:

"It was already known that between 30% and 60% of people with skin conditions show psychiatric symptoms. What we have done is look at things from the opposite direction; do people with mental health problems have skin conditions, and if so, can this tell us anything useful?

Our findings suggest that dermatological symptoms may represent a marker of illness severity and poor short-term outcomes in the early stages of psychosis, potentially identifying a subgroup of patients with a poorer clinical prognosis who may benefit from early tailored interventions. The reason for the connection is still unclear, but our working hypothesis is that this may be due to the skin and neurological systems having common developmental origins and inflammatory pathways; but this needs to be confirmed. As far as we know this is the first study to show this link in patients with psychosis, so we need follow-up studies to confirm the finding. We also need to understand if this link applies also to a range of other psychiatric conditions, such as bipolar disorder, ADHD, anxiety or depression".

Commenting, Professor Eric Ruhe (Professor of Difficult-to-Treat Depression at Radboud University, the Netherlands) said:

"This is an interesting association between skin problems and a first episode of psychosis. These results need replication in different cohorts but might indeed show a new link between skin and psychopathology.

As the skin and the brain derive from the same embryonic origin, this would worth pursuing further, both diagnostically and mechanistically (which may be more interesting). For example, this association might be used to culture skin cells to begin to understand which treatment is appropriate".

This is an independent comment, Professor Ruhe was not involved in this work.

ENDS

Notes for Editors

This work is presented at the 38th ECNP Congress, taking place in Amsterdam and online 11-14th October 2025, see https://www.ecnp.eu/congress2025/. With more than 6,500 participants the ECNP Congress is Europe's leading platform for the science and treatment of brain disorders.

Conference Abstract

Psychodermatology in early psychosis: optimising the mind-skin link

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Background: Psychiatric symptoms have been reported in 30-60% of dermatological patients [1], while dermatological symptoms (DS) are associated with primary psychiatric disorders [2]. Notably, the skin and the nervous system share a common embryonic origin, as both derive from the ectoderm [2]. Psychodermatology explores the complex interplay between the mind and the skin, with increased attention given to the the role of psychoneuroimmunology in this bidirectional relationship [2]. Growing evidence suggests that individuals with first-episode psychosis exhibit a pro-inflammatory status, supporting hypothesis that immune dysregulation contributes to the onset and progression of psychotic disorders [3, 4]. This study aimed to estimate the prevalence of DS in a large sample of patients with first-episode schizophrenia (FES) and to examine its demographic and clinical correlates over a 4-week follow-up.

Methods: We analysed Phase 1 data from the OPTiMiSE trial, which included 481 FES patients from 14 European countries and Israel. Participants were aged 18–40, met DSM-IV criteria for schizophrenia, schizophreniform, or schizoaffective disorder, had a duration of psychosis <24 months, minimal or no prior antipsychotic exposure (≤2 weeks at baseline), and all received open-label amisulpride treatment for 4 weeks [5]. DS presence was defined as a score of ≥1 on cutaneous items 4.1–4.4 (rash, pruritus, photosensitivity, and increased pigmentation) of the UKU-SERS "other symptoms" subscale. FES patients with and without DS were compared on demographic and clinical characteristics using chi-square and Student's t-test. Linear regression models were used to examine the association between baseline DS severity and clinical and functional outcomes (PANSS, CDSS, CGI-S, PSP, SWN) at the 4-week follow-up, adjusting for age, sex, race, substance use, concomitant medication, cumulative dose of antipsychotic, and baseline value of the outcome variable.

Results: The prevalence of DS at baseline was 14.5%, higher among females (24.4% vs. 9.8%, χ^2p<0.001), with no significant differences by race (white vs. other, χ^2p=0.547) or age (24.6 vs. 25.9 years, MD=1.27 ± 0.901, p=0.158). Pruritus was the most common DS (6.3%), followed by photosensitivity (4.3%), rash (2.7%), and increased pigmentation (0.3%). DS prevalence at baseline did not differ between antipsychotic-naïve and quasi-naïve patients (18.4% vs. 12.7%, χ^2p=0.154), or by cumulative antipsychotic dose (CPZE: 2543 vs. 5007, p=0.721). No significant associations were found between baseline DS and the use of any substance (χ^2p=0.445), concomitant medication (χ^2p=0.113), duration of untreated psychosis (months: 6.71 vs. 6.64, p=0.938), or diagnostic category (χ^2p=0.963). In fully adjusted regression models, DS at baseline were associated with greater severity of depressive symptoms (CDSS-T: β=0.147, p<0.001), general (PANSS-G: β=0.113, p=0.013) and total symptomatology (PANSS-T: β=0.094, p=0.031), and clinical impression (CGI-S: β=0.096, p=0.046), as well as poorer functioning (PSP: β=-0.108, p=0.032) and subjective well-being (SWN: β=-0.119, p=0.009), at 4-weeks.

Conclusions: Our findings suggest that DS may represent a marker of illness severity and poor short-term outcomes in the early stages of psychosis, potentially identifying a subgroup of patients with a poorer clinical prognosis who may benefit from early tailored interventions. Further research is warranted to explore the potential role of DS as early clinical predictors in psychosis.