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Pruritic urticarial papules and plaques of gestation in perinatal depression

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Introduction The cutaneous polymorphic eruption of pregnancy (PEP) is presented by skin lesions usually in the third trimester of gestation and about 13% of women also suffer from perinatal depression.
Objective To determine the frequency of pruritic urticarial papules of gestation with and without perinatal depression.
Aim To assess the maternal causes for polymorphic eruption of pregnancy (PEP) in patients with and without perinatal depression.
Methods Cases and controls were matched on the grounds of maternal weight gain in gestation, hormonal changes, deficit in iron and zinc, dysregulation of hypothalamic pituitary axis, pre-maturity, pre-eclampsia, pre-term labour. Univariate and multivariate analysis, adjusting for important demographic factors and comorbodities was conducted to assess the relationship of PEP with and without perinatal depression in reduced and full models of ANOVA in regression analysis. (Reduced model $Y = \beta_0 + \beta_1 X_1 + \ldots$ and the full model $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \ldots$)
Results Polymorphic eruption of pregnancy with perinatal depression was statistically significant in maternal weight gain in gestation [odds ratio (OR) 1.20; 95% (CI): 1.15–1.30], hormonal changes [(OR) 2.78; 95% (CI): 2.52–2.82], deficit in iron and zinc [(OR) 2.18; 95% (CI): 2.04–2.38], dysregulation of hypothalamic pituitary axis [(OR) 1.37; 95% (CI): 1.18–1.49] and was not statistically significant in pre-maturity, pre-eclampsia and pre-term labour in cases and controls.
Conclusion Pruritic urticarial papules and plaques of gestation are commonly associated in patients with perinatal derpession.
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Biomarkers of response to transcranial magnetic stimulation in youth with treatment resistant major depression

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Background Major depressive disorder (MDD) affects approximately 15% of youth, half of who do not respond to standard treatment. One promising intervention is repetitive transcranial magnetic stimulation (rTMS). However, response is limited, highlighting the need to focus on biomarkers to predict treatment response.
Objectives To explore baseline biomarkers of response associated with rTMS treatment in adolescent MDD.
Aims To determine the association between dorsolateral prefrontal cortex (DLPFC) glutamate levels, cortical thickness, and cerebral blood flow (CBF) with MDD symptomatology decrease after rTMS intervention.
Methods Twenty-four MDD youth underwent 3 weeks of rTMS, baseline and post-intervention magnetic resonance imaging scans, and short echo proton magnetic resonance spectroscopy. Response was determined by a 50% reduction of depression scores.
Results Depressive symptoms decreased with rTMS ($t = 8.304$, $P = 0.00$). Glutamate levels differed significantly between responders and non-responders ($t = 2.24$, $P = 0.0039$), where higher glutamate changes were associated with a better response ($r = 0.416$, $P = 0.038$). Responders also exhibited thinner DLPFC ($r = -0.797$, $P = 0.000$) and lower CBF levels.
Conclusions The development of biomarkers for rTMS represents a novel and encouraging technique for a personalized and effective treatment while reducing ineffective treatment costs and personal burden in adolescent MDD.
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Adults with persistent ADHD: Gender and psychiatric comorbidities – a population-based longitudinal study

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Objective To evaluate in adults the associations between persistent ADHD and comorbid psychiatric disorders and gender differences, among subjects from a population-based birth cohort.
Method Subjects were recruited from a birth cohort of all children born during 1976–1982 who remained in Rochester, MN after five years of age. Participating subjects with research-identified childhood ADHD ($n = 232$; mean age 27.0 years; 72% men) and non-ADHD controls ($n = 335$; mean age 28.6 years; 63% men) were administered a structured psychiatric interview (MINI-