Blunted autonomic reactivity and increased pain tolerance in somatoform patients.

Somatoform disorders are characterized by the presence of multiple somatic symptoms. Patients often experience different pain syndromes, and recent research suggests that sympathovagal balance is disturbed in somatoform patients, which could be related to alteration in pain sensitivity. This study analyzed how proposed sympathovagal imbalance interacts with objective pain assessment and the imagination of pain in somatoform disorders. Twenty-one patients (4 men) with diagnosed multisomatoform disorder were included in the study and matched to healthy control subjects. Autonomic measures and heart rate variability were assessed during baseline; pain perception was assessed by means of a pressure algometer and pain imagination. We found evidence for a sympathovagal imbalance in somatoform disorders characterized by low parasympathetic activation and high sympathetic activation during all conditions. Additionally, somatoform patients had reduced pain tolerance. Vagal withdrawal during pain assessment was more pronounced for healthy control subjects and correlated positively with assessed pain tolerance. During imagination somatoform, patients reported higher pain unpleasantness and higher pain intensity as compared to control subjects. We conclude that our data demonstrate an imbalance in sympathovagal activation and a
hyposensitivity to pain tolerance stimuli in somatoform disorders. Parasympathetic reactivity might form crucial information when judging pain-associated affective-motivational components. Our results might be attributable to a deficient detection of visceral signals and might be a pathogenetic mechanism for the development of emotional difficulties and increased everyday vulnerability in somatoform patients.