PRURITUS

PRURITUS AND THE BRAIN-SKIN AXIS: WHAT IS NEW?

Gil Yosipovitch [(1)]

University of Miami, Dr Phillip Frost Department of Dermatology and Miami Itch Center, Miami, United States Of America [(1)]

Here, we review brain neuroimaging research in humans that detect functional and structural changes in acute itch and in chronic itch . These studies have demonstrated that various brain regions are involved in processing of itch. Chronic itch is strongly associated with emotional, cognitive aspects as well as psychological stress can influence itch.
The lecture will cover the potential roles of the most frequently activated brain regions of itch and describe the function of itch selective areas. Structural changes in gray matter have also been noted in chronic itch. Furthermore in recent functional connectivity studies we demonstrated that the posterior insula and basal ganglia are important in regulation of subjective mechanical itch in healthy subjects. All this data suggests that drugs, cognitive behavioral therapy targeting the brain can provide benefit to reduce itch by a top down approach.