

Slow Cortical Potentials (SCP) during habituation conditioning and extinction in rabbit cortex

Pinto-Hamuy, Teresa

Bracchitta, Humberto

Lagarrigue, Isabel

The evolution of DC cortical shifts during learning, as well as its association with behavioral responses, were studied in thirteen rabbits using unpolarizable electrodes chronically implanted. The animals were trained to an avoidance CR, ten of them with a light and three with a tone, as CS. A possible relationship between SCP and emotional activation was sought through a correlation analysis run between DC responses and heart rate changes, obtaining a negative answer. The hypothesis that SCP are necessary for the establishment of a temporary connection at cortical level, was forwarded by the results of the individual and group correlation analysis. Twelve out of thirteen Ss showed a positive and significant correlation between CR and this electrical sign. Although SCP are not unique to the learning process, they appear as an electrical sign of an essential process for the establishment of a temporary connection. © 1969.