

PARACRINE REGULATION OF THE ADRENAL GLAND

ASOK GHOSH*

The traditional concept regarding the anatomical closeness between adrenal cortex and medulla bears no apparent functional significance. However, there is now sufficient evidence that the products of each of these tissues may influence the function of the other (Paracrine effect). It is well established that Glucocorticoids secreted by the cortex are drained through the blood vessels and regulates the conversion of Norepinephrine (NE) to Epinephrine (E). Indeed, more intriguing, is the question of how medullary products can reach the cortex and modulate the cortical function. The neural pathway connecting medulla to cortex is probably the most candid answer. In support of this several neuropeptides and biogenic amines are identified in the adrenal cortex and further the source of these neurotransmitters being the perikarya associated with medullary tissue. These neural products in turn may modulate glucocorticoid synthesis/ secretion through a paracrine mode of communication.