

CONTRIBUTION TO THE UNDERSTANDING OF STRESS

INTRODUCTION by Ida P. Rolf, Ph.D.

The thesis which first came to our desk, the subject of this discussion, is the outstanding 262 page dissertation of Peter Levine submitted to the University of California, Berkeley, as a contribution to physiology. It is titled "Accumulated Stress, Reserve Capacity, and Disease". The word "stress" was rarely featured in scientific discussions twenty-five years ago. Its current emphasis marks the drastic change of thinking in present-day observation of human problems. Peter's dissertation is an exhaustive review of the articles which have mile-posted this change of understanding.

Stress, according to Levine, may be defined as a process whereby a stimulus activates the autonomic nervous system to such a degree that return to the homeostatic balance can be interfered with. Stress therefore may be seen in terms of autonomic activation and accumulation. For example, a consequence of unresolved autonomic stress, or of improper use of the body musculature, as in bad habits (Alexander) or by chronic immobilization of the myofascial network (Rolf), the probability of a given autonomic stress being resolved is diminished. The accumulation of stress, again, is expressed motorically as a further loss in this capacity by flexor rigidity and then concurrent agonist-antagonist "paralysis."

Levine's thesis is that stress and the chronic stress diseases are expressions of functional unbalance primarily within the autonomic nervous system, a disharmony in the relation of the sympathetic and parasympathetic systems. Whether or not his assumption is correct, his unfolding of this point of view is a valuable contribution to those who try to alleviate the "human condition", as well as to those who try to understand it.

Some of the stress-generated diseases enumerated are:

- Central Nervous System: anxiety neurosis, obsessional neurosis, traumatic neurosis, epilepsy, migraine, shock, exhaustion
- Endocrinural: primary and secondary thyrotoxicosis, diabetes mellitus, menopausal syndrome
- Circulatory: hypertensions: essential hypertension, hypertensive heart disease, chronic nephritis and nephrosclerosis, malignant hypertension; rheumatic fever; coronary tensions: agina pectoris, coronary occlusion, coronary thrombosis; cerebral tensions: hypertensive encephalopathy, cerebral thrombosis, cerebral hemorrhage; arterial tensions: Raynard's disease, intermittant claudication.
- Alimentary: caridospastic (esophageal); gastritis, gastric ulcer: duodenitis, duodenal ulcer; regional ileitis; colitis: pancreatitis
- Genito-Urinary: menopause, leucorrhea, menstrual pain, ectopic pregnancy, impotence, cystitis.

Dematological: various rashes, psoriasis

Locomotor: torticollis (wry neck), lumbago, rheumatic fever, rheumatism, rheumatoid and atrophic arthritis, gout, tennis elbow.

In a work-a-day world, it is simple and convincing to see effort — mental as well as physical — as an expression of stimulation and over-stimulation of the sympathetic system. It is somewhat more difficult to envisage behavior appropriate to resolve the resulting accumulations. In his admirably understated and concise overview of therapeutic practices, Peter states: "Hence, in terms of the preceding models and arguments, one major avenue (and probably *the most accessible one*) to deal with (modify) the mechanisms of stress accumulation is directly at the muscular level, i.e., to affect the autonomic via its somatic connections." In this connection, it is well to remember those teachers (Alexander and Rolf) who have stressed the direction of "let it" rather than "do it." Such direction tends to de-emphasize the sympathetic component activity and allow the parasympathetic component to take on a more dominant role. We quote Peter's abstract below. A copy of the entire thesis may be obtained from the Boulder office, at cost, which is about \$17.50.