

THE SHORT LEG

The expression "short leg" is not well understood in the majority of cases because it suggests that the cause of the shortness of the extremity is inherent within the leg itself. There are many reasons for leg imbalance: bone deformities, pathological causes, traumatic causes and unilateral breakdown of an arch, however, the great majority of instances of leg imbalance is due to spastic contracture of the extensor muscles of the lower spine and pelvic girdle producing a structural imbalance, making the one leg appear slightly shorter.

It is perhaps more appropriate to use the term "contractured leg". This denomination denotes more accurately the neurological-pathological picture as seen so frequently in the chiropractor's practice. The term gives emphasis to the causative factor which is that of a neurological imbalance which manifests itself as an innervational over-load to the extensor muscles causing spastic contracture of these muscles, ending up with distortion of the pelvic girdle and unequal extremities.

When we look at the scientific literature, we see that "Muscular spasticity" is described by Magoun and Rhines as, "an exaggeration of spinal stretch reflexes." To understand this, it is necessary to recognize the function of the two central mechanisms, the central inhibitory and the central facilitatory mechanisms. The former, located in the brain, serves to reduce spinal stretch reflexes. The latter appears to have several sources, some in the cord itself, some in the brain stem, some in the cerebellum, and some in the cerebral cortex. The impulses from any of these facilitatory mechanisms serve to augment stretch reflexes. When an interference, caused by disease or injury, cuts off the inhibitory influences, the normal stretch reflex augmented by impulses from any of the uninjured facilitatory mechanisms results in the exaggeration of stretch reflexes, known as spasticity."

The reticular formation of the brain stem (medulla) gives rise to descending connections which supply motor outflows in the spinal cord and exert influences upon the cerebral cortex. The higher connections increase spinal motor discharge; the lower decrease motor discharge. Imbalance between the motor connections due to some traumatic or pathological interference

is a determinant of spasticity because such imbalance prevents the inhibitory influences from modifying the facilitatory influences. The result is an over innervation of the extensor muscles to contract.

The neurological imbalance as described above can be caused by the misalignment factors of the Atlas Subluxation Complex. Spastic contracture along with distortion of the lumbar vertebrae and pelvic girdle will result in disparity of the lower extremities. This can be removed by correction of the misalignment factors of the A.S.C.

The adverse influences of the A.S.C. upon the continuous nervous structure of the cervical spinal cord, brain stem and hind brain are clearly evident in its far-reaching effects upon the lower spinal column. Substantiation has been based upon mathematical precision, and upon clinical research that has studied many thousands of cases.

Thus, the ASC is often a definite causative factor, the quantitative analysis of which specifically relates to the contractured leg. The maximum correction of the ASC problem is vitally essential to the alleviation of the neurological imbalance which causes the spastic contracture, body distortion, center of gravity displacement and resultantly unequal extremities.

The NUCCA procedure has been shown to consistently correct the ASC and restore normal body balance with a normal center of gravity. ♦

