tive reflex mechanism in the arm that follows head-up tilt can be blocked. This suggests the existence of a spinal sympathetic reflex mechanism leading to peripheral vasoconstriction in response to head-up tilt in tetraplegics. A humoral mechanism at that level can be ruled out since proximal nervous blockade prevented vasoconstriction. This reflex mechanism, in addition to the local vaso-arteriolar reflex, could explain why tetraplegics are eventually able to cope with orthostatic manoeuvres without fainting.

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SUMMARY OF PAPER

DERMAL FIBROSIS SECONDARY TO AUTONOMIC DYSFUNCTION FOLLOWING SPINAL CORD INJURY

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Spinal Cord Injury patients with injuries above T6 who have autonomic dysfunction have been observed to develop skin changes which appear clinically as brawny induration and pathologically show dermal fibrosis. Twenty patients were studied. There were no consistent changes in laboratory values. Histochemical studies of skin biopsies showed that aminergic innervation of the erector pili muscles and blood vessels were intact but the cholinergic supply to the Pacinian corpuscles and sweat glands was markedly decreased. Studies of the skin biopsies with indirect immunofluorescence for collagen typing showed a reduction in Type III collagen in the upper dermis with almost exclusive Type I collagen in the dermis and adipose tissue, resembling the late stage of progressive systemic sclerosis. It is hypothesised that autonomic dysfunction, with either an excess or deficiency of autonomic mediators, initiates cellular and/or vascular alterations which primarily or secondarily induce the observed fibroproliferative changes.