

CASE REPORTS

VENOUS THROMBOSIS AND PULMONARY EMBOLISM OCCURRING AT CLOSE INTERVALS IN SPINAL CORD INJURY PATIENTS*

By J. H. FRISBIE, M.D., M. SARKARATI, M.D., G. V. R. K. SHARMA, M.D.
and A. B. ROSSIER, M.D.

*Spinal Cord Injury and Medical Services, Veterans Administration Medical Center,
West Roxbury, MA 02132 and Departments of Medicine and Orthopedic Surgery,
Brigham and Women's Hospital, Harvard Medical School, Boston, MA 02115.*

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WE report two acute spinal cord injury patients with angiographically documented pulmonary embolism who coincidentally had been screened for venous thrombosis at the time of the embolic event. Both patients were negative by ^{125}I fibrinogen leg scanning the day prior to the embolic event. One patient had venous thrombosis demonstrable by leg scanning the day of the embolic event and one by venography the day after the event. Other sources of pulmonary emboli such as the upper extremities, the right side of the heart, or pelvic veins were not ruled out. It is suggested, nevertheless, that thrombosis and embolism can occur at close intervals and that a negative screening test for venous thrombosis cannot insure against pulmonary embolism.

Case Reports

Patient One

A 42-year-old man, became paraplegic when he fell while moving heavy equipment. Treatment included bed rest, pelvic traction, passive exercise to the lower extremities, and sodium heparin in a dose of 5000 USP units subcutaneously every 12 hours. Surveys for venous thrombosis were conducted by ^{125}I fibrinogen leg scanning and impedance plethysmography. The results through post injury day 10 were negative. Chest pain developed on post injury day 11 and pulmonary angiography revealed submassive pulmonary embolism. Follow-up leg scanning could not be carried out, and impedance plethysmography remained negative on day 11; but contrast venography on post injury day 12 demonstrated venous thrombosis of the calf veins of one extremity. (See Table I).

Patient Two

A 22-year-old man, became tetraplegic in an automobile accident. Treat-

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TABLE I
Time of detection of venous thrombosis and pulmonary thromboembolism

	Patient 1						Patient 2				
	3	5	7	10	11	12	3	4	10	11	12
Post Injury Day											
Leg Scanning	—	—	—	—	*	*	—	—	—	—	+
Impedance Plethysmography	—	—	—	—	—	—	—	—	—	—	—
Symptom					+						+
Pulmonary Angiogram					+						+
Venogram						+					

*Leg scanning was not continued because of radioisotopic interference from a ^{99m}technetium macroaggregated albumin lung scanning procedure.

ment included bed rest, traction, and passive exercise to the lower extremities. Surveys for venous thrombosis through post injury day 11 were negative. Dyspnoea and dizziness developed during passive exercise to the lower extremities on post injury day 12; leg scanning conducted an hour later was positive; and pulmonary angiography revealed massive pulmonary embolism. (See Table 1).