

LETTER TO THE EDITOR

Response: Pulmonary embolism in chronic spinal cord injury

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To the editor

Dr Silver has supplemented our review of pulmonary embolism (PE) in chronic spinal cord injury (SCI)¹ with surveys and case reports of PE 90–180 days after SCI.^{2–5} The prevalence of PE during this period was 2%. By comparison, in our review, we found 11 surveys for PE after paralysis of more than 1 year with a PE prevalence of <1%. These reports taken together appear to document a tapering of the risk for PE with longer survival of the SCI subject.

Included in the review, however, was our survey showing a PE prevalence of 18.7% in 112 men chronically paralyzed because of SCI.⁶ This survey had been conducted by annual electrocardiogram (ECG) screening for pulmonary hypertension, presenting as right bundle branch block (RBBB). PE had been ruled in as the cause of RBBB based on autopsy, imaging, clinical and electrocardiographic evidence. The median onset of PE was 32 years after SCI and the average onset and duration of RBBB before death was 6 years. Combining all surveys, again including those brought to our attention, it appears that the natural history of PE after SCI is an initially high prevalence, tapering after the first year of paralysis, but followed eventually by another high prevalence of PE. The early PE is large, clinically obvious and quickly fatal. The late PE is small, subtle, but hemodynamically significant and sometimes fatal.

A general autopsy survey of the non-paralyzed has revealed frequent small, resolving PE but without information about their

hemodynamic significance.⁷ The value of an ECG survey in the chronically paralyzed is therefore apparent. Dr Silver's letter has served to remind us of the problem of late onset PE in subjects with SCI.

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