

Comparison between Critical Pathway Guidelines and Management of Deep-Vein Thrombosis: Retrospective Cohort Study

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Aim. To compare the key steps of standard deep-vein thrombosis management with the critical pathway practice guidelines, and to assess the outcome of the treatment after 6 months.

Method. This retrospective cohort study (from January 1, 1997 to December 31, 1998) included 172 patients with uncomplicated deep-vein thrombosis of lower extremities, consecutively admitted *via* emergency room. The data were collected from the entry register in emergency room and from medical charts. The outcome of therapy was assessed 6 months after the acute event.

Results. A bolus dose of heparin was administered to 81 (46%) patients. The recommended initial heparin infusion rate at 1250 U/h was employed in only 26 (15%) patients. Time to activated partial thromboplastin time >60 s was met in 29 (17%) patients. All patients but one received heparin therapy longer than 96 h. The recommended time to a therapeutic international normalized ratio of less than 120 h was achieved in 134 (78%) patients, but the average length of a stay in the hospital exceeded the recommended 5.5 days by 86%. Six months later, compressive ultrasonography revealed 44 (28.9%) cases of complete vein obstruction, 67 (44.1%) cases of partial recanalization and 41 (27%) cases with a normal finding. Recurrent thrombosis developed in 16 patients (10.5%) and acute pulmonary embolism in 4 (2.6%) patients.

Conclusion. Our results considerably differ from the critical pathway guidelines, mainly due to lower initial heparin doses and longer diagnostic assessment of thrombosis etiology. Our approach to deep-vein thrombosis was between the critical pathway guidelines and the conventional regimen. The clinical outcome in our series did not differ significantly from that after the conventional way of treatment.

Key words: *anticoagulants; heparin; international normalized ratio; partial thromboplastin time; pulmonary embolism; thromboembolism; thrombolytic therapy; treatment outcome; venous thrombosis; warfarin*