

Heart Congress and Cardiac Surgery

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New perspectives for prevention of the post-thrombotic syndrome

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The cornerstones of PTS prevention are the treatment of acute DVT with catheter-directed pharmaco-mechanic thrombolysis (CDT), the use of elastic compression stockings (ECS), and the replacement of vitamin K antagonists (VKA) with the novel direct oral anticoagulants (DOAC) for the initial and long-term treatment of DVT. The earlier recanalization of obstructed vessels with the use of thrombolytic drugs has long been advocated to decrease the rate of PTS. As, however, the results of a recent large randomized controlled clinical trial addressing the value of CDT for prevention of PTS in patients with proximal DVT failed to show an advantage of CDT over anticoagulation alone [1], the benefit/risk profile of this strategy remains uncertain. ECS are expected to play a role in preventing PTS. Although a large, double-blind randomized clinical trial failed to confirm the advantage of ECS [2], a recent meta-analysis of available controlled studies turned out to indicate a trend favoring the use of ECS [3]. Based on the results of a recent sub-analysis of a prospective cohort study, ECS are likely to prevent the development of PTS in patients with residual vein thrombosis (RVT) and/or popliteal valve reflux (figure 1) [4]. The inadequacy of VKA treatment is likely to play a key role in the development of PTS. The DOACs have now become commercially available worldwide. Because of their predictable pharmacokinetics, they can be used in fixed dose, without laboratory monitoring, and result in a much more stable anticoagulation than that induced by VKAs. Their use for the initial treatment of DVT is associated with a lower incidence of RVT than in patients treated with VKAs and has been reported to reduce the incidence of PTS [5].

Biography

Paolo Prandoni was born in 1947, graduated in Padua in 1971, and became PhD at Amsterdam University in 1992. He became Associate Professor of Internal Medicine in 2000, and Full Professor at the Department of Cardiovascular Sciences of Padua University in 2006. He belongs to the Scientific Committee of the Arianna Foundation on Anticoagulation in Bologna. His scientific activity is documented by almost 600 articles “in extenso” in high-impact scientific medical journals dealing with the pathophysiology, diagnosis and management of venous thromboembolic disorders.

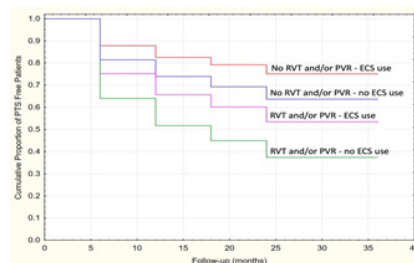


Figure 1. Cumulative incidence of PTS-free patients according to the presence of residual vein thrombosis (RVT) and/or popliteal valve reflux (PVR) and use of elastic compression stockings (ECS)

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