

# Thematic Series on Clinical Cases on Haemostatic Disorders

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In daily clinical practice, venous thromboembolism (VTE) may be divided into provoked VTE or unprovoked VTE as a VTE event that appears without recent contact with common thrombotic risk factors.<sup>1</sup> This classification is relevant, because the duration of anticoagulant treatment differs in cases of provoked or unprovoked VTE. In this way, provoked VTE is a VTE event that appears in the presence of such thrombotic risk factors. Common thrombotic risk factors have been identified by international guidelines as clinical conditions that need pharmacological prophylaxis to prevent VTE (i.e., recent surgery, recent hypomobilization, pregnancy, hormonal treatment, molecular inherited/acquired thrombophilia, cancer and its therapy).<sup>2</sup> However, using this method, nearly 40% of VTE events may be considered unprovoked or idiopathic,<sup>1</sup> although other clinical conditions such as inflammatory bowel diseases, immunopathological diseases and other molecular defects may be associated with VTE, as hypofibrinolysis and so on.<sup>3</sup> Acquired resistance to protein C activity, postinflammatory increase of factor VIII, and antiphospholipid antibodies are all conditions that may be associated with VTE.

On the other hand, hemorrhagic diseases may also be provoked (e.g., neoplasia or other ulcerative diseases, drugs and so on)<sup>4,5</sup> or unprovoked but associated with molecular alteration of hemostasis inherited/acquired with a trend toward hemorrhagic events (e.g., abnormal platelet function, hemophilias or acquired hemophilia due to inhibitors).<sup>6,7</sup>

Yet, clinical alteration of hemostasis with overt VTE or bleeding has frequently been considered a transversal event or as a complication during another active comorbidity, but may assume a relevant clinical character for severe and life-threatening manifestations.

Therefore, in the following thematic series, several authors have described very particular case reports that associated thrombotic or bleeding manifestations during unusual molecular alteration or comorbidity. In particular, Scudiero et al. described a change in hemostatic balance and in the protein C system due to strenuous exercise,<sup>8</sup> Di Micco et al. described an association between idiopathic hyperosinophilia and VTE, Russo et al. reported the clinical dilemma that may be present in morbid obesity that requires anticoagulation for atrial fibrillation, and Gussoni et al. reported a very rare case of acquired factor XIII deficiency associated with recurrent bleedings<sup>9</sup>; on other hand, Galbiati reported a life-threatening cerebral hemorrhage during anticoagulation with edoxaban treated successfully with a prothrombin complex concentrate.<sup>10</sup>

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The knowledge that may be induced in daily clinical practice is relevant for thrombotic events, the duration and the intensity of antithrombotic treatments, in fact, in these cases are still a matter of discussion. The etiology of VTE events, in fact, is strongly recommended to establish the duration of therapy by international guidelines. On the other hands for bleeding disorders clinical contraindications of such useful drugs during particular medical illness associated to bleedings is a crucial way and it may influence all therapeutic supports, thereby inducing a continuous clinical dilemma in the management of these patients.

## Disclosure

The author reports no conflicts of interest in this work.

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