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Editorial

Superficial Vein Thrombosis of Lower Limb, A Methodological Approach That Needs to be Improved

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For long time superficial vein thrombosis (SVT) of lower limbs has been considered a benign disease because not associated to severe complications as pulmonary embolism (PE). Yet, in the last 15 years several studies testified nearly 25-30% of patients with SVT show complications as extension to deep venous system (i.e. deep vein thrombosis, DVT) or as PE [1,2] so inducing a strong debate in the scientific community concerning the best antithrombotic treatment for SVT.

So, double blind randomized trials [3,4] were planned and were focused for the treatment of SVT with fondaparinux or low molecular weight heparin (i.e. parnaparin) or direct oral anticoagulants (i.e. rivaroxaban) [5,6] and gave good information about the outcomes of patients with SVT and about dosages and duration of the acute treatment for SVT. Yet, what do we know about secondary prevention of SVT? Should we perform it always or only in particular clinical condition? And what is the best long term treatment for patients that did not show vascular recanalisation after a SVT? Is there a role for thrombophilia in these cases? These questions are only the most common question that are planned from patients or physicians after a standard treatment suggested by international guidelines of 6 weeks [6] for a SVT; moreover, for this kind of questions each expert gives his/her best medical suggestion based on his\her clinical experience and no more because there not data in Literature nor guidelines that can suggest a quite way for patients concerning this topic.

Yet, these issues have born because in the last years the clinical history of SVT maybe have been restarted form therapy and prognosis observed during the follow up of reported clinical trials [3-5]. Few information, in fact, are available concerning prophylaxis of lower limb SVT. Literature can support us about primary or secondary prophylaxis of other venous thrombosis as DVT or PE in several clinical settings as medical diseases or surgical diseases [7,8] but there are not studies concerning prophylaxis of SVT. This clinical aspect represent a statistical and methodological paradox because it is well known that the frequency of SVT is increased compared to that of DVT and PE.

In last 20 years, several articles are also available about the incidence and the type of prophylaxis of venous thrombosis but with particular attention only to or PE as after orthopaedic surgery or other type of surgery (e.g. gynecologycal surgery or oncological surgery [9-12]; on the other hand we have not data from these large studies about prophylaxis of SVT?

Why is present this misunderstanding in daily clinical practice? The right clinical answer is related again to several aspects: first of all SVT was considered a less dangerous disease compared to DVT or PE and for this reason the thromboprophylaxis of DVT and PE was considered to be effective also for SVT although we have not a similar methodological approach to confirm this; moreover, for this reason we usually consider risk factors of DVT or PE identical for SVT too although we know that there are adequate differences. We know that the most common risk factor for SVT is the presence of lower limb varies but which data are available in large population concerning incidence, prevalence and strategy to prevent SVT on varicose veins? This information is poor in clinical practice and a right methodological approach is not always supported by evidence based medicine. In the same way another clinical condition associated to SVT is pregnancy and there are not useful information from clinical trials or registries in the Literature about incidence and \ or prevalence of SVT in pregnancy or puerperium but these data are available if other venous thrombosis as DVT or PE are considered.

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So, if we consider clinical score and risk assessment model available in our clinical practice to prevent venous thromboembolism we should consider that these methods are well tested concerning the prevention of DVT or PE but not for SVT although if they are suggested by ACCP as the PADUA score or other score [13]; the confirm of this point of view originate from the absence of most common risk factors for SVT, as the presence of varicose veins and the presence of pregnancy, in those scores.

Furthermore, another strong point of discussion about daily clinical practice is about methodology for diagnosis of a SVT and it is related to a frequent misunderstanding: clinical diagnosis of a SVT is possible in particular in presence of a varicose vein and other thrombotic risk factors so the support of ultrasound scan to confirm this may be not considered in short time, but we also know the diagnosis of SVT by ultrasound scan is needed if a SVT on a not-varicose vein occurs and also about the length of the thrombosis that add interesting data about follow up and the risk of recurrence or post thrombotic syndrome as suggested several years ago from Villalta et al. [14].

These clinical and practical considerations are due to the frequency of daily clinical dilemma for inpatients or outpatients and represent a compare with patients and their relatives and with other colleagues.

In conclusion, more appropriated studies should be focused to a better knowledge of risk factors of SVT, in particular to their incidence as far as strategies to perform the better prophylaxis of SVT. These data could be added to those already available in the Literature concerning acute pharmacological treatment of SVT.

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