EGYPTIAN VENOUS NEWSLETTER

MAY 2021 - VOL. 2

This Issue is Sponsored by: ROYAL VASCULAR CENTER

On behalf of Egyptian Venous Forum, I welcome all phlebology collogues along the universe to follow our 2nd bimonthly newsletter for the year 2021 and I would like to thank all friends for their positive feedback about the previous issue. There was a question released in a discussion few weeks ago with Dr. Erika Mendoza, the general secretary of German society of Phlebology and Dr. PL. Antignani, the president of IUA about the role of Aspirin in the treatment and prophylaxis protocol of thrombosis in COVID–19 patients.

Please take few minutes to join this survey:
(I like to have an international multicenter study adding Aspirin in the protocol of prophylaxis and treatment of thrombosis in COVID-19 Patients):

☐ Yes ☐ No

Let us go all together and hand in hand to keep the momentum of providing the approved new technology and studies to all friends.

M. Ayman Fakhry

Prof. M. Ayman Fakhry
EVF Chariman

Prof. Joseph A. Caprini, MD, MS, FACS, RVT, DFSVS
Emeritus, NorthShore University Health System Evanston, IL 60201
Senior Clinician Educator, Pritzker School of Medicine

THE IMPACT OF MODIFIED CAPRINI SCORE IN COVID-19 PATIENTS

The high prevalence of venous thromboembolism (VTE), including deep vein thrombosis (DVT), pulmonary embolism (PE), and pulmonary artery (PA) thrombosis, among the inpatients and critically ill patients, have been reported since the beginning of the pandemic.[1-2]

Considering the high incidence of thrombotic complications in COVID-19, most of the current guidelines suggest routine prophylaxis using low-molecular weight heparin (LMWH) or unfractionated heparin (UFH) for patients admitted to the hospital.[3-4]

Risk factors assessment was so crucial in addressing the proper prophylaxis program and this is why Dr. Caprini developed a modified Caprini Score for COVID – 19 patients as follows:

- 2 Points for asymptomatic infection
- 3 Points for symptomatic infection
- 5 Points for symptomatic infection with positive D-dimer test.

The modified version considering the COVID-19 points (Caprini [COVID-19:adm]) provided the highest AUC. The score of ≥11 with the sensitivity of 68% and specificity of 75% predicted the unfavorable outcome.[5]

CONCLUSION

Studies identified a direct correlation between the Caprini score and the risk of VTE or unfavorable outcomes in COVID-19 patients. The score of ≥7, as calculated at the admission, or ≥11, as evaluated at the discharge, predicts symptomatic venous thromboembolism despite pharmacological prophylaxis. The predictability of the original score may be improved by the implementation of a D-dimer or specific COVID-19 points. However, the original Caprini score is essential. Further studies are needed to determine if there are any clinical benefits using the modified COVID-19 Caprini score. It will be especially important to track 90-day clinical events based both on the discharge modified Caprini score and the use of post-discharge prophylaxis.[5]

REFERENCES

1- COVID-19 associated with acute respiratory distress syndrome. Lancet Respir Med.2020;8(4):420-2.
2- Nahum J, Morichau-Beauchant T, Daviaud F, Echegut P, Fichet J, Maillet J-M, et al. Venous Thrombosis Among Critically Ill Patients with Coronavirus Disease 2019 (COVID-19). JAMA Network Open. 2020;3(5): e2010478-e
3- Spyropoulos AC, Levy JH, Ageno W, Connors JM, Hunt BJ, Iba T, et al. Scientific and Standardization Committee Communication: Clinical Guidance on the Diagnosis, Prevention and Treatment of Venous Thromboembolism in Hospitalized Patients with COVID-19. Journal of Thrombosis and Haemostasis. 2020; n/a(n/a)
4- National Institutes of Health. COVID-19 Treatment Guidelines Panel. Corona virus Disease 2019 (COVID-19) Treatment Guidelines.
5- Sergey Tsaplin1,2, Ilya Schastlivtsev1,2, Kirill Lobastov1, Sergey Zhuravlev2, Victor Barinov2,Joseph A Caprini3The validation of the original and modified Caprini score in COVID-19 patients Preprint · June 2020 DOI: 10.1101/2020.06.22.20137075

VEIN WEEK GLOBAL PROJECT

Efficacy of an Innovative Model for Public Venous-Lymphatic Awareness Enhamcements in Pandemic Time

GIANESINI S,1,2 CHI YW,3 BOTTINI O,4

1. University of Ferrara (ITALY) *2. Uniformed Services University of Health Sciences (USA)*

3. University of California Davis (USA) *4. Buenos Aires University (ARGENTINA)*

The pandemic upended the traditional meeting format. An alternative was proposed by a global educational project called "Vein Week" (www.vwinfoundation.com/vw). The initiative consisted in both local/regional online and, wherever possible, in-person educational activities adhering to a previously designed common calendar. The project was initiated by venous-lymphatic World International Network foundation (v-WIN)(www.vwinfoundation.com), a non-profit organization dedicated to education and research in the venous-lymphatic field. A dedicated open access software was used to geo-localize the events, grouping them in thematic allowing the developers to upload autonomously the features of the various activities . 114 top venous and lymphatic experts functioned as developers of local events, representing all continents (Fig. 1). The developers delivered 271 events with the thematic focus reported in Fig. 2. The software reported 112,729 visualizations in the dedicated week. The geographical representation of the countries attending the initiatives is reported in Fig. 3.

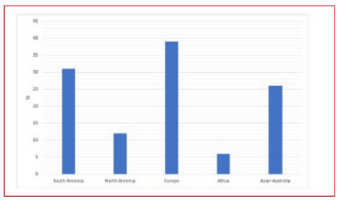
Fig. 1 

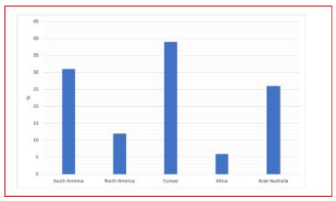
Fig. 2 

Fig. 3 

Worthy of notice, the Vein Week initiative received an institutional call to action from the United Kingdom parliament group for venous-lymphatic disease, the endorsement of the Italian Bord of Physicians, the recognition of the Paraguay Ministry of Health, the multidisciplinary representatives involvement from the International Society of Orthopedic Surgery and Traumatology and from the European Board & College of Obstetrics and Gynecologist Vein Week initiative offered an example of educational strategy accomplishing multiple aims. In a time in which international gathering is extremely limited by the pandemic containment, the initiative brought together all continents, with reciprocal visibility and usability of local events on a global dedicated on-line platform. The enormous number of attendees pointed out the strong interest raised by initiatives like this, particularly in the venous-lymphatic field. The empowerment of local experts was recognized as a major benefit, as the opportunity to showcase educational material from anyone who had a valuable content. An important outcome of the initiative was also the engagement of countries usually silent in the traditional educational activities. Vein Week offered a free open access platform, with a structured format allowing individuals unfamiliar with education designs to exhibit valuable content. Moreover, the software facilitated development of synergy amongst different groups and countries found themselves united by similar projects and interests. The daily calendar breakdown led to the benefit of avoiding similar events overlapping and lined up the different national teams, uniting them in accomplishing a joint mission, enriched by the regional perspectives. The social networks were recognized as fundamental tools in public health communication. Yet, an alarming 2018 publication reported close to 40% of the most frequently shared links contained medical fake news and were shared more than 450,000 times ("The spread of medical fake news in social media. Health Pol Tech 2018").In consideration on the issue of medical fake news, Vein Week project relied on the steering committee and the dedicated software to verify the appropriateness of the content. With the same focus, v-WIN will host the v-WINter 10th international inter-university meeting in Phlebology & Lymphology next February 3-5, 2022, in Dubai during the universal Expo, dedicating the event indeed to the venous-lymphatic fake-news free communication(vwinfoundation.com/vwinter-dubai-2022).

Conclusion

Vein Week formula can offer an example of "unity that makes strength", particularly during pandemic time in which the same strength and proper venous-lymphatic awareness are extremely needed.

Acknowledgments

The authors would like to deeply thank prof. Ayman Fakhry and all the Egyptian Venous Forum for the invitation of this article. Special gratitude is also expressed toward all the developers and active attendees of all the initiatives delivered around the world during the Vein Week project.

LETTER TO THE EDITOR

Dear editor,
Over the last two decades deep venous system disease becomes a hot territory for interventions with advances in endovascular tools. As catheter-based approach is considered a main stay of contemporary therapy for various venous disease, it leads to precise understanding of the defective anatomy of venous system based on its embryological background.
37 years old female presented with extensive right iliofemoral DVT in the form of phlegmasia cerulea dolens, anticoagulant therapy was initiated with full lab investigations to assess thrombophilia possibility. Thrombolysis using CDT, completion venogram showed residual thrombus with underlying culprit iliac stenosis that mandated iliac vein stenting. My strategy with stent deployment is to use contralateral venous access to avoid jailing of contralateral common iliac vein with deployed stent. On doing conventional venogram duplicated IVC was surprisingly diagnosed. I decided to abolish the process ...What do you suggest?

Sincerely yours'
Ahmed Khairy Allam, MD
Benha University Hospital

Editor's Reply

Dear Professor Ahmed,
You have a point. I my self did not face this situation previously as it is not a common presentation of the IVC , however if I were in your position, I would go on using IVUS and deploy the proper venous stent that surely could improve the venous out flow. Also, I received comments from 3 experts.

M. Ayman Fakhry

Prof. Suat Dogancy
Professor of Vascular Surgery Gulhane University, Ankara .Turkey
Dear Friend,
He was wise not to put a stent as recanalisation of iliac tract dose not mean anything. I can send you a similar case with failed stents who was treated elsewhere.

Prof. Samer Kossayer
Consultant and Head of Vascular Division of King Faisal Specialized Hospital and Research Center ,KSA
Dear Ayman,
Double IVC is a known anomaly, and I was confronted by such a case of double IVC when I was inserting an IVC filter so; I was obliged to put 2 filters. He can go and proceed by placing the iliac vein stent as I don not see that double IVC is a contraindication for iliac vein stenting and it may make the procedure much easier.

Prof. Houman Jalaie
Attending Professor, Head of European Venous Center .Achen - Maastricht

Dear Ayman:
As we all know that double IVC is a reported anomaly and we had 2 ladies with DVT and duplicated IVC that we delt with. We showed one of them in the EVC last March as it was nicely improved the venous outflow after iliac vein stent and perfect outcome for the patient. So, he should stent the iliac stenosis and evaluate the entire iliac tracts and IVC.

What to consider about heparin anticoagulation in patients admitted to hospital with COVID-19

Results of interim analysis of the multiplatform randomised controlled trials (incorporating REMAP-CAP, ATTACC and ACTIV-4a trials)

Royal College of Physicians

Organization	Severe COVID-19 patients (ICU)	Moderate COVID-19 patients (ward)
British Thoracic Society brit-thoracic.org.uk	Conventional low-dose thromboprophylaxis. Consider higher doses of LMWH in a proportion of patients. D-dimer may indicate risk.	Not specifically discussed.
International Society on Thrombosis and Haemostasis PMID: 32459046	Conventional low-dose thromboprophylaxis after considering the bleeding risk. Consider intermediate-dose LMWH (50% of panel).	Conventional low-dose thromboprophylaxis after considering the bleeding risk. Consider intermediate- dose LMWH (30% of panel)
American College of Chest Physicians PMID: 32502594	Conventional low-dose thromboprophylaxis preferred over intermediate or higher doses.	Conventional low-dose thromboprophylaxis during inpatient stay only.
Global COVID-19 Thrombosis Collaborative Group PMID: 32311448	Conventional low-dose thromboprophylaxis. Insufficient data to recommend intermediate or therapeutic doses.	Conventional low-dose thromboprophylaxis. Insufficient data to recommend intermediate or therapeutic doses.
Faculty of Intensive Care Medicine icmanaesthesiacovid-19.org	Intermediate or higher doses of LMWH.	Conventional low-dose LMWH. D-dimer levels alone should not be used to guide LMWH dosing.
American Society of Hematology hematology.org/covid-19/covid-19-and-vte-anti coagulation	Conventional low-dose thromboprophylaxis.	Conventional low-dose thromboprophylaxis.
NICE nice.org.uk/guidance/ng186/chapter/Rationales	Consider intermediate-dose LMWH.	Conventional low-dose LMWH.
WHO COVID-19 Clinical management guidelines https://www.who.int/publications/i/item/WHO-2019-nCoV-clinical-2021-1	Conventional low-dose thromboprophylaxis.	Conventional low-dose thromboprophylaxis.

* ICU = intensive care unit; LMWH = low-molecular-weight heparin

INTERNATIONAL VENOUS EVENTS

JUNE 4- 5 (LEUVEN, BELGIUM)

Annual Meeting
Benlux Society of Phlebology

JUNE 24 - 26 (Online)

21st Annual Scientific Meeting of the European Venous Forum (EVF)

SEPT 25 - 29 (Lisbon, Portugal)

Cardiovascular and Interventional Radiological Society of Europe (CIRSE) Annual Meeting 2021

SEPT 28 - 29 (Rotterdam, Netherlands)

European Society for Vascular Surgery (ESVS) 35th Hybrid Annual Meeting

OCTOBER 3 - 4 (Las Vegas, USA)

The VEINS at VIVA

OCTOBER 7 - 10 (Denver, USA)

35th Annual Congress of the American Vein & Lymphatic Society (AVLS)

OCTOBER 10 - 14 (Luxor, Egypt)

8th Egyptian Venous Forum International Congress

VENOVALVE DEMONSTRATE PROMISE FOR CVI TREATMENT

In the USA, 2.4 million people are affected with chronic venous insufficiency, Ulloa et al noted in their study. Moreover, one million are treated for venous stasis ulcers, with few options available to patients who develop post-thrombotic disease secondary to deep venous reflux.

first-in-man study and According to trial investigator Jorge H Ulloa, the VenoValve, is a combination of a stainless-steel frame and porcine aortic monocusp leaflet, and was developed to be surgically implanted into the deep venous system—the femoral popliteal vein—of patients with C5–C6 disease. Endpoints of the study were to evaluate safety, "which is very important in a first-in-man study," said Ulloa, who continued: "These include reflux by duplex ultrasound and femoral popliteal vein, as well as clinical assessment by a vascular surgeon. Also, pain scoring, the visual analogue scale (VAS) score and quality of life outcomes were evaluated by the patients during this study." Ulloa added: "All cases have demonstrated a marked improvement in the reflux, with most of them reaching baseline except in patient six. Significant clinical improvements were also observed. Many patients went from moderate to severe to mild disease by clinical assessment." Summing up his findings, Ulloa concluded: "We had an overall improvement in reflux by 40%, a clinical improvement by 61% with an average of 8.4 points and a 57% pain improvement. The implantation technique has evolved a great deal since the first case was performed, with an average timing of 40 minutes. Our results of this feasibility study are on the way.

Hancock Jaffe Laboratories recently announced that the US Food and Drug Administration (FDA) has approved the company's Investigational Device Exemption (IDE) application to begin the US pivotal trial for the VenoValve. The VenoValve is an implantable valve designed to restore proper directional blood flow for patients with chronic venous insufficiency (CVI) of the deep veins of the leg. The SAVVE (Surgical anti-reflux venous valve endoprosthesis) trial is a prospective, non-blinded, single-arm, multicenter study of 75 CVI patients to be enrolled at up to 20 US centers. The trial's primary effectiveness endpoint is a reduction in reflux at six months, and the primary safety endpoint is the absence of a major adverse event (MAE) The company expects sites to join the SAVVE study on a rolling basis following receipt of the necessary site approvals and documentation and appropriate site training. The company expects to begin patient enrolment in the third quarter of 2021 .