Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Fish oil and COVID-19 thromboses

The timely report by Marone and Rinaldi,[1] "Upsurge of deep venous thrombosis in patients affected by COVID-19: preliminary data and possible explanations," provides important information about vascular thrombotic events, including thrombotic loss of vascular access catheters in hospitalized patients with SARS-CoV-2. Others reported similar findings.[2] The thrombotic nature of the coagulopathy in this disease has been described.[3]

In 2018, we published on the nutritional prophylaxis of catheter-associated deep venous thrombosis (DVT) in another population.[4] Nonrandomized pediatric home parenteral nutrition patients with vascular access catheters receiving soy oil intravenous lipid emulsion (ILE) were compared with patients receiving fish oil ILE for intestinal failure-associated liver disease. Catheter-associated DVTs were observed in those receiving soy ILE but not in those receiving fish oil ILE. Supportive findings have been reported.[5] Fish oil ILE alters platelet function[6] but does not increase bleeding events in surgical patients.[7] Other studies showed that fish, fish oil, and fatty acid esters derived from fish oil offer protection from selected cardiovascular events unassociated with central vein catheters, probably related to effects on platelet function,[8] without increased bleeding risk.

Enteral fish oil and fish oil ILE have been administered to patients with severe bacterial sepsis,[9] with reports of improved clinical end points. However, robust evidence for beneficial effects on the course of sepsis and associated acute respiratory distress syndrome is lacking. Safety concerns have not emerged from such studies, with one exception where bolus enteral fish oil was administered.[9] Late beneficial central nervous system effects of fish oil ILE seen after hospitalization for sepsis may be relevant to patients with severe COVID-19.[10]

We concur with Marone and Rinaldi that further attention to the problem of DVT in SARS-CoV-2 patients is needed. Preliminary recommendations exist regarding the use of heparin derivatives and other drugs with hemostatic effects in the management of these patients.[11] There is also evidence that fish oil may reduce thrombotic events. We believe that now is an appropriate time to conduct studies on the potential role of fish oil ILE as an adjunct to other therapies in adult patients admitted with SARS-CoV-2 at risk for vascular thrombotic events.

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My vascular diary on coronavirus disease-19 pandemic and ideal health care settings

Confronting coronavirus disease-19 has created an unusual national crisis. What have we have learned? Presentation includes cough, fever, sputum production, fatigue, and shortness of breath. Yet myalgia, headache,