WINFOCUS WORLD CONGRESS 2025

COSTA RICA December the 5th 2025

INTRODUCTION AND PROGRAM - CAMPUS on the Assessment of PERFUSION AND SYSTEMIC CONGESTION

Date: December 5, 2025
Time: 8:50 am to 1:00 pm
Duration: 40 minutes
5 Slots Available: (9:00–9:40) (9:50–10:30) (10:40–11:30) (11:30–12:10) (12:20–13:00)
Language: English

INTRODUCTION

Clinical signs of shock are typically assessed through three main "windows": skin, kidneys, and brain. However, these signs may appear late. Biochemical markers such as hyperlactatemia, reduced central or mixed venous oxygen saturation ($SvCO_2$, SvO_2), and an increased veno-arterial carbon dioxide difference (the "pCO_2-gap") require time, may not be immediately available, and often reflect organ damage that has already occurred. In contrast, the direct assessment of end-organ perfusion using Doppler ultrasound is feasible at the bedside, precedes changes in clinical and biochemical signs, and may have significant implications for treatment guidance.

GENERAL OBJECTIVE:

How to assess splanchnic perfusion

By the end of the workshop, participants will be able to integrate ultrasound as both a diagnostic and procedural tool in the assessment of splanchnic perfusion.

SPECIFIC OBJECTIVES

1. Identify and measure the inferior vena cava
2. Identify the hepatic veins and acquire venous Doppler flow patterns
3. Perform ultrasound measurements of the portal vein
4. Identify renal arterial and venous vessels and obtain resistive index and renal venous Doppler patterns
5. Identify and sample the splenic resistive index and measure spleen dimensions
6. Develop practical skills through supervised rotating stations
7. Critically evaluate the use of ultrasound in the advanced management of splanchnic perfusion

ADVANCED WORKSHOP PROGRAM – SPLANCHNIC PERFUSION ASSESSMENT

Timing	**Activity**	**Faculty**
5 minutes	Welcome and introduction of the faculty. Group allocation.	Dr. Francesco Corradi
30 minutes	**Hands-on Stations** **Technical skills:** – **Inferior vena cava:** assessment of collapsibility/distensibility index – **Hepatic veins:** waveform interpretation (A, S, D waves) with ECG trace when possible – **Portal vein:** coronal and subcostal views, Doppler sampling and calculation of the portal vein pulsatility index – **Kidneys:** sampling interlobar arteries and veins, explaining renal resistive index and venous flow patterns with laptop support. Introduction to renal artero-venous coupling	Dr. Julina Noor Dr. Claudia Brusasco Dr. Nuno Cortesao

	– Spleen: Doppler sampling of hilar arteries and measurement of the splenic resistive index. Bipolar spleen diameter measurement across the hilum **Non-technical skills:** – Integrating and interpreting ultrasound findings in the clinical context of shock	
5 minutes	Ending remarks	

FACULTY TEAM

Dr. Francesco Corradi (Coordinator)
Dr. Nuno Cortesao
Dr. Claudia Brusasco
Dr. Julina Md Noor