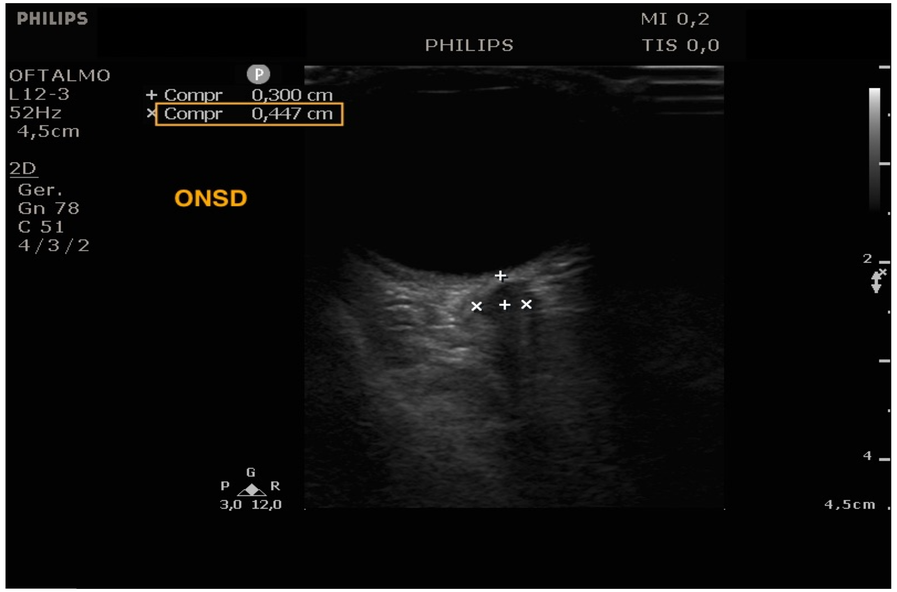
Optic Nerve Sheath Diameter and Ophthalmic Artery Doppler in Pregnant Patients as Point-of-Care Ultrasound for Anesthesiologists

Yamaguchi E, Ferraz A, Lange M

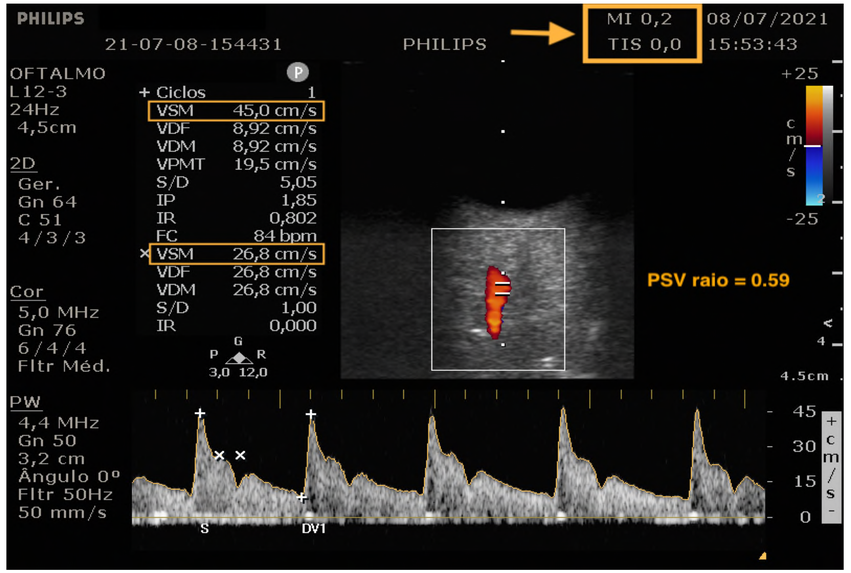
PoCUS

ONSD



- Linear correlation with ICP
- Cut-off 5.8 mm

Ophthalmic Artery Doppler



- PSV ratio: predictor of PE



The greater ONSD, the higher PSV ratio

Prospective cohort study
1st or 2nd trimester pregnancy
ONSD & Ophthalmic Artery Doppler
Power output MI < 0.23; TI = 0
Linear transducer 12 - 4 MHz
Closed upper eyelid
Follow up: PE





- 28 patients
- PE (3/28)
- ONSD 4.51 $\pm$ 0.32 mm
- PSV ratio 0.56 $\pm$ 0.13
- No correlation between ONSD & PSV ratio (p = 0.72)

Discussion

SOAP
Society for Obstetric Anesthesia and Perinatology

SOAP 2022
Annual Meeting

- No clear relationship between ONSD and PSV ratio
- Feasible PoCUS for Anesthesiologists
- Non-invasive
- Well tolerated by patients
- Window into the cerebrovascular structures

1. Ortner CM, IJOA. 2020
2. Nicolaides KH, Am J Obstet Gynecol. 2021
3. Kane SC, J Clin Ultrasound. 2019