

Name:
Group: GM, DM

School year:
Date of measurement:

Report

Topic: The use of ultrasound in medicine I

Exercise 1: Measure the blood flow velocity in the human artery (Artery carotis).
Determine:

v_1 —the systolic velocity, v_2 —the diastolic velocity, Δv —velocity between the points of measurement, **PI**—the pulsatility index, **RI**—the resistative index, **PSV**—the threshold value of systolic velocity, **EDV**—the velocity at the end of diastolic, **MnV**—the mean velocity, **FlowT**—the flow time.
Then determine their average.

Devices and implements: ALOKA ProSound SSD-350, gel.

Procedure: according to the instructions

Measured values and calculations:

	For the interval 1	For the interval 2	Average
v_1	[cm/s]	[cm/s]	[cm/s]
v_2	[cm/s]	[cm/s]	[cm/s]
Δv	[cm/s]	[cm/s]	[cm/s]
v_1/v_2			

	For the interval 1	For the interval 2	Average
PI			
RI			
PSV	[cm/s]	[cm/s]	[cm/s]
EDV	[cm/s]	[cm/s]	[cm/s]
MnV	[cm/s]	[cm/s]	[cm/s]
FlowT	ms	ms	ms

Exercise 2: Listen to the Artery carotis and Vena carotis and differentiate their sounds.

Observation:

	The sound:
Artery carotis	
Vena carotis	

Conclusions and commentary: