

Echocardiogram report

March 31, 2023, 10:47 am

Patient

Surname: **Case 4**
Name: **MR**
ID:
Height: 186cm
Patient height
Weight: 100kg
Patient weight
BMI: 28.9kg/m²
Body mass Index
BSA: 2.3m²
Body surface area
Age: 80 rokov
Patient age
HR: 100/min
Heart rate

Right ventricle

RVD1_{basal}: 3.4cm
Right ventricular basal diameter at end-diastole
RVD2_{mid}: 3.1cm
Right ventricular mid diameter at end-diastole
RVD3_{long}: 6.5cm
Right ventricular longitudinal diameter at end-diastole
TAPSE: 20mm
Tricuspid annular plane systolic excursion

Aortic valve

Vmax AoV: 1.8m/s
Aortic valve maximum velocity

Left ventricle

LVIDs: 5.5cm 2.4cm/m²
Left ventricular internal dimension at end-systole
LVIDd: 6.4cm 2.8cm/m²
Left ventricular internal dimension at end-diastole
IVSd: 1.2cm
Interventricular septum thickness at end-diastole
PWd: 1.2cm
Left ventricular posterior wall thickness at end-diastole
RWT: 0.4
Relative wall thickness
LV mass: 349g 152g/m²
Left ventricular mass
LVEDV: 140ml 60.9ml/m²
Left ventricular end-diastole volume (Biplane)
LVESV: 79ml 34.3ml/m²
Left ventricular end-systole volume (Biplane)
LV EF: 44%
Left ventricular ejection fraction (Biplane)

LV diastolic function

E-wave: 106cm/s
Peak velocity in early diastole (Passive flow)
A-wave: 33cm/s
Peak velocity in late diastole (Atrial contraction)
MV E/A: 3.2
MV E/A = E-wave / A-wave
LA volume: 37.4ml/m²
Left atrial volume (Biplane)
MV DT: 222ms
Mitral valve deceleration time

Atria

LA AP: 4.9cm 2.1cm/m²
Left atrium anterior-posterior dimension
LA volume: 86ml 37.4ml/m²
Left atrial volume (Biplane)
RA major: 4.8cm 2.1cm/m²
Right atrium major axis dimension
RA minor: 4.5cm 2cm/m²
Right atrium minor axis dimension
RAP: 3mmHg
Right atrial pressure

Inferior vena cava

IVC_{diameter}: 1.7cm
Inferior vena cava diameter
IVC_{sniff}: 0.5cm
Inferior vena cava diameter during sniff
IVC_{collaps}: 70.6%
Inferior vena cava collapsibility

Kinetics

Infero-lateral akinesis

Mitral valve

Va: 39cm/s
Aliasing velocity
VCW: 0.6cm
Vena contracta width
PISAr: 0.6cm
Proximal isovelocity surface area radius
Vmax MR: 4.3m/s
Peak velocity mitral regurgitation
EROA: 0.21cm²
Effective regurgitant orifice area

Aorta

AoA: 20mm 8.7mm/m²
Aortic annulus diameter
AoSV: 28mm 12.2mm/m²
Aortic sinuses of valsalva diameter
AoSTJ: 22mm 9.6mm/m²
Aortic Sinotubular Junction diameter

Conclusion

- 1 - Mitral regurgitation grade II (EROA 0,21 cm2)
- 2 - Infero-lateral akinesis, with reduced EF 44%
- 3 - Diastolic dysfunction grade III
- 4 - Left atrium dilatation (37.4ml/m2)