Increased circulating blood volume may contribute to hypertension and could adversely affect ventricular diastolic function via an effect on cardiac pre-load. We examined a novel test of acute pre-load reduction on echocardiographic indices of diastolic function in patients with essential hypertension.

**Design and method:** Patients with essential hypertension on treatment (n = 44, mean age 56 ± 12 years, blood pressure 155 ± 110/91 ± 17 mmHg, 13% African descent) underwent transthoracic echocardiography (TTE) including assessment of inferior vena cava (IVC) diameter and superior vena cava (SVC) blood flow (Doppler flow velocity of S wave). Diastolic function was assessed through measurement of left atrial volume (LAV), peak mitral early (E) and late diastolic filling velocities (A) and their ratio (E/A), E wave deceleration time (DT) and the ratio (E/E') between E and tissue Doppler annular early diastolic velocity. TTE was repeated after passive leg raising (inducing a gravitational transfer of blood from the lower limbs toward the intrathoracic compartment) and their ratio (E/A), E wave deceleration time (DT) and the ratio (E/E') between E and tissue Doppler annular early diastolic velocity. TTE was repeated after passive leg raising (inducing a gravitational transfer of blood from the lower limbs toward the intrathoracic compartment) and respective increase and decrease cardiac pre-load.

**Results:** Baseline BP and heart rate were not significantly altered by the interventions (mean change in systolic BP and heart rate <2 mmHg and <2 bpm respectively). Leg raising had minimal effects on IVC/SVC indices and no significant effects on indices of diastolic function. By contrast, leg cuffs significantly decreased IVC diameter (from 1.35 ± 0.43 to 1.10 ± 0.33 cm, and SVC S wave velocity from 65 ± 21 to 54 ± 18 cm/s, both p < 0.01) and improved all indices of diastolic function: LAV reduced from 49.1 ± 15.2 to 44.5 ± 13.6 ml, E/A from 1.09 ± 0.33 to 0.88 ± 0.34, E/E' from 8.16 ± 0.41 to 6.8 ± 2.3, DT increased from 205 ± 110 to 236 ± 49 all p < 0.01).

**Conclusions:** Diastolic function in hypertension can be altered by a BP independent reduction of cardiac pre-load, induced non-invasively during a conventional TTE. The novel test of pre-load reduction proposed here might prove useful in identifying patients with elevated pre-load who would benefit from pharmacological treatment to reduce this.

**PP.24.02 MANAGEMENT OF ORAL ANTICOAGULANTS IN OUTPATIENTS WITH NONVALVULAR ATRIAL FIBRILLATION DAILY ATTENDED BY CARDIOLOGISTS**

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**Objective:** To analyze the management of dabigatran and vitamin K antagonists in outpatient with nonvalvular atrial fibrillation in clinical practice in Spain.

**Design and method:** This is an ongoing observational, prospective and multicenter study in which outpatients with NVAF daily attended by cardiologists treated with dabigatran or vitamin K antagonists (VKA).

**Results:** Mean age of patients was 73.5 ± 9.5 years, and 56.4% of patients were men. Mean CHA2-DSD-VASc score was 3.6 ± 1.5 and mean HAS-BLED score 1.4 ± 1.1. Permanent atrial fibrillation was reported in 41.7% of patients, paroxysmal atrial fibrillation in 33.5% of patients and persistent atrial fibrillation in 24.8% of patients. With regard to treatment, 69.2% of patients were taking beta blockers, 22.6% amiodarone, 12.2% digoxin, 9.3% class IC antiarrhythmic drugs, 8.5% calcium channel blockers and 1.7% dronedarone. With regard to anticoagulant therapy, 505 patients were taking dabigatran (57.9% dabigatran 150 mg bid and 42.1% dabigatran 110 mg bid) and the remaining 144 patients vitamin K antagonists. The most important reason for choosing dabigatran 110 mg bid was advanced age (64.2%) followed by concern about bleeding risk (32.5%).

**Conclusions:** Outpatients daily attended by cardiologists in Spain have a high risk of thrombembolic events, but a low/moderate risk of bleeding. The majority of patients are polymedicated. The main reason for prescribing dabigatran 110 mg bid was advanced age.