second to hypertensive heart disease (HLVH) using 2D speckle tracking imaging.

Methods: 2D fort chamber long-axis and basal, middle, and apical short-axis of LV images were acquired in 97 patients with LVH including 67 with HCM and 30 with HLVH, and in 30 age-matched controls. Radial strain, longitudinal strain, time interval from the R-wave to peak radial strain (Trs), and time to peak longitudinal strain (Tls) were measured in six equidistant segments at each level of the 3 LV short-axis and 4C long-axis views using 2D speckle tracking analysis. To assess LV dysynchrony, Trs (rs)-18SD, the standard deviation (SD) of Tls (ls) was calculated.

Results: Regional radial strain in the middle and apical short-axis segments was significantly less in patients with HCM than in those with HHD (56.0±23 VS 45.0±21 and 47.0±19 VS 38.0±17respectively, p<0.01 ). Regional longitudinal basal strain was also less in HCM (−13.3±3.3% VS −17±2.9%, p=0.002). Trs-18SD and Tls were significantly longer in patients with HCM than in age-matched controls and patients with HLVH (Trs-18SD: HCM: 68±22ms, HHD: 21±11ms, control: 15±12m P < 0.001, Tls − : HCM: 7 – ±12ms, HHD: 44±11ms, control: 33±13ms P < 0.001).

Conclusions: The presence of LVH is thus not always associated with LV dysynchrony. However, the greater reduction of regional strain and severe LV dysynchrony in HCM may contribute to the adverse cardiovascular outcomes associated with this disease.

0380
Cardiac tolerance of bevacizumab associated with trastuzumab and conventional treatment in patients with primary inflammatory HER2-positive breast cancer
Camille Wehrlin, Pamela Moceri, Emile Ferrari
CHU Pasteur, Cardiologie, Nice, France

Background: Breast cancer is the most frequent female cancer. Treatment of HER2+ tumours evolved with immunotherapy, leading to improved survival. Cardiac toxicity associated to trastuzumab is frequent but reversible in 75% of cases. However, only little is known about the cardiotoxicity of new anti-HER2 antibodies associated to trastuzumab. In this study, we aimed to assess the cardiac tolerance of bevacizumab associated with trastuzumab and chemotherapy in HER2+ breast cancer patients.

Methods and results: This is a post-hoc analysis of the BEVERLY-2 study, aiming to assess the efficacy of neoadjuvant bevacizumab, trastuzumab, and chemotherapy for primary inflammatory HER2+ breast cancer. A cohort of 52 patients was prospectively included. Left ventricular ejection fraction (LVEF) was assessed by echocardiography and/or isotropic ventriculography every three months during the mean follow-up of 33±3.42 months. Mean age prior to chemotherapy was 49.75 years ±11.60. On inclusion, mean LVEF was 66.56±13.13. There was no significant difference between LVEF on inclusion and before the 5th cycle of chemotherapy fifth cycle (C5) (66.56±13.13 vs 65.11±7.68, p=0.24), whereas LVEF was significantly reduced at the end of the neoadjuvant therapy (62.07±7.84 vs 66.56±13; p=0.0001). The nadir of LVEF was 57.87%±8.79 and occurred generally during the adjuvant period. In 16 patients, LVEF decreased below 50% after neoadjuvant therapy but complete recovery of LVEF was observed in all at the end of the follow-up, 3 months after the end of the treatment (Figure 1, next page).

Conclusion: In this study, with an effective treatment protocol for inflammatory breast cancer, reduction in LVEF was observed in 30% of patients, however, it was reversible in all. Nadir of LVEF was observed after neoadjuvant therapy (31%). This timing and the possibility of recovery should be considered when discussing the interruption of chemotherapy because of reduced LVEF during the follow up.

0488
Predictive genetic testing in hereditary heart diseases: a single-center series of 304 subjects
Céline Bordet (1), Elsa Le Boet (1), Audrey Mallet (1), Marie-Lise Babonneau (1), Sabine Fosse (2), Marcella Gargiulo (2), Estelle Gandjbakhch (1), Veronique Fressart (3), Pascale Richard (3), Delphine Heron (2), Michel Komajda (1), Philippe Charron (1)
(1) CHU La Pitié-Salpêtrière-APHP, Referral Centre for Hereditary Heart Diseases, Genetics, Paris, France – (2) CHU La Pitié-Salpêtrière-APHP, Génétique, Paris, France – (3) CHU La Pitié-Salpêtrière-APHP, Referral Centre for Hereditary Heart Diseases, Biochemistry, Paris, France

Hereditary heart diseases are typically characterized by autosomal dominant inheritance and delayed cardiac expression. Predictive genetic testing is offered to asymptomatic relatives to allow targeted medical care with early therapies in order to reduce the risk of complications (sudden death, heart failure). Psychological and sociological issues related to predictive testing are however complex and have been poorly studied. Predictive genetic testing is performed in our multidisciplinary out-patient clinic dedicated to cardio- genetics since 1999.

To evaluate our practices regarding predictive genetic testing for hereditary heart diseases and study the behavior of relatives after pre-test consultation (information phase), especially regarding a waiting period that was offered before blood sampling.

We retrospectively studied records from 304 consecutive relatives seen in our department and have requested predictive genetic testing. Underlying diseases in the families were HCM (60%), DCM (17%), ARVC (15%), LQT (5%), Brugada syndrome (2%) and other (1%). A total of 21 different genes were analyzed and most frequent ones were MYBPC3 (97%), MYH7 (77%), LMNA (37), PKP2 (29) and TNNT2 (16). There were 260 adults and 44 minors. At the time of the first consultation, the average age was 37 years, and 83% of the relatives previously had a cardiac checkup (echocardiography for 71%).

After first multidisciplinary consultation, 22 relatives (8%) dropped out of procedure (did not performed blood sampling) and 11 relatives (3%) performed blood sampling but did not come back to know their results. Blood sample was present in 36% of relatives (leading to careful follow-up and cascade screening in offspring) and absent in 64% (they were reassured and discharged from care).

We observed a high level of genetic uptake after initial consultation but a minority of relatives decided to stop or delay the procedure. These results suggest the benefit of a waiting period before blood sampling and illustrate the importance of a multidisciplinary team in this setting.

0531
Long-term experience with heart transplantation in children and patients with congenital heart disease
Sylvie Di Filippo, Magali Veyrier, Roland Henaine, Corinne Duceux, Jean Ninet, Laurent Sebbag, Pascale Boissonnat, Ana Roussoulieres, Sylvie Di Filippo
Hôpital Cardiovasculaire, Cardiologie pédiatrique et congénitale, Lyon, France

This study assessed the long-term outcome of heart (HTx) and heart-lung transplantation (HLTx) in patients with congenital heart disease (CHD) and children with non-congenital cardiac or pulmonary disease.

Methods: Retrospective single-centre analysis of long-term posttransplant outcome, with chart collection of clinical and paraclinical data.

Results: From 1984 to 2013, 111 first-HTx, 5 HLTx and 6 re-HTx were performed (62males), in patients aged 11.7±8.2y; 96(79%) aged ≤18y. Cardiopathy included 61 cardiomyopathies (50.8%), 50 CHD (41.7%), 6 retransplants (5%), HLTx included 1 Eisenmenger, 1 PPH, and 2 pulmonary diseases. Patients with cardiomyopathy were younger than CHD (8.7y vs 14.9y).Seventeen (14%) patients had circulatory mechanical support as bridge to transplant. Acute rejection occurred more frequently within the first year post-transplant or > 5thyear in non-compliant teenagers. Overall 33 patients died (27%), 3.5±4.6y postTx (1 day