



AC061

Adult Cardiology & Clinical Cardiovascular Medicine • Poster Presentation

BENDOPNOEA AND ECHOCARDIOGRAPHIC MARKERS OF CONGESTION IN NIGERIAN CHRONIC HEART FAILURE OUTPATIENTS: A CROSS-SECTIONAL STUDY

CT Onyema, N Obeka, BJC Obeka, SO Ogah

Stand: POSTER #AC061 | **Venue:** Poster Exhibition Hall & Gallery - Eko Convention Centre | **Online Ref:** <https://nigeriancardiacsociety.com/abstracts/AC061>

Background: Bendopnoea, breathlessness occurring within 30 seconds of bending forward, is associated with elevated cardiac filling pressures, but its echocardiographic correlates are poorly described in African heart failure populations. We examined its association with echocardiographic markers of congestion in Nigerian chronic heart failure outpatients.

Methodology: In this cross-sectional study, 240 adults attending a Nigerian tertiary cardiology clinic underwent standardised bendopnoea assessment and transthoracic echocardiography. Echocardiographic evidence of pulmonary hypertension was assessed using guideline-directed criteria. Group differences were assessed with chi-square tests, followed by multivariable logistic regression using prespecified clinical and echocardiographic covariates.

Results: Bendopnoea was present in 56 patients (23.3%). Compared with those without bendopnoea, affected patients more frequently had left-atrial dilation (67.9% vs 44.6%; $p=0.002$), E/e'_{14} (67.9% vs 48.9%; $p=0.013$), and echocardiographic pulmonary hypertension (62.5% vs 27.2%; $p<0.001$). After adjustment, left-atrial dilation remained independently associated with bendopnoea (adjusted odds ratio 2.63, 95% confidence interval 1.07–6.47; $p=0.035$), while pulmonary hypertension showed a positive but borderline association (adjusted odds ratio 2.20, 95% confidence interval 0.91–5.35; $p=0.082$). In sensitivity analysis excluding left-atrial dilation, pulmonary hypertension was independently associated with bendopnoea (adjusted odds ratio 2.75, 95% confidence interval 1.18–6.41; $p=0.019$).

Conclusions: Bendopnoea was associated with left-atrial dilation, elevated E/e' , and echocardiographic pulmonary hypertension. This simple bedside symptom may help prioritise echocardiographic assessment in resource-limited heart failure care.

Keywords: Bendopnoea, Heart failure, Echocardiography, Pulmonary hypertension, Left atrial dilatation, Cardiac Congestion