SUPPLEMENTAL MATERIAL
Figure S1. Representative images from echocardiograms from PBS, MCT, and MCT-Colch rats.

(A) Pulse-wave Doppler interrogation of the RVOT. Distance between dotted red lines signifies PA-AT. (B) Pulse-wave Doppler of RVOT. Teal line is used to quantify the VTI for cardiac output calculation. (C) M-mode images used to calculate TAPSE. Red line shows TAPSE values. (D) M-modes images of RVFW. Red line indicates diastolic RVFW thickness.
Figure S2. RV microtubule misregulation in MCT rats.

(A and B) Representative Western blots and quantification of α-(3.0±0.6-fold increase, \(p=0.018\)) and β-tubulin (2.5±0.3-fold increase, \(p=0.004\)) protein levels from RV extracts. CBB: Coomassie brilliant blue. (*) indicates \(p<0.05\) as determined by \(t\)-test. (C) Confocal micrographs of RV sections from PBS and MCT rats stained with a β-tubulin antibody (green) showing increased microtubule density in MCT RV section as compared to PBS control. Scale bar: 10μm
Figure S3. The LV is spared from JPH2-mediated t-tubule disruptions in MCT rats.

(A) Representative Western blots and (B) quantification of α-tubulin and JPH2 in LV extracts.

α-tubulin is significantly reduced in MCT-Colch LV extracts. α-tubulin quantification
JPH2 is increased in both MCT and MCT-Colch LV extracts. JPH2 quantification (PBS:1.0±0.08 AU, \( n=5 \), MCT:0.88±0.06 AU, \( n=5 \), and MCT-Colch:0.59±0.07 AU, \( n=5 \)).

Confocal micrographs of LV sections labeled with JPH2 antibody (green). There is normal JPH2 localization in all three groups. (PBS:47.1±2.3 AU, \( n=46 \) cells from three animals, MCT:51.7±2.8 AU, \( n=40 \) cells from three animals, MCT-Colch:51.5±3.3 AU, \( n=40 \) cells from three animals) (D). Confocal micrographs of LV sections stained with WGA (green) to label t-tubules (E). Normal t-tubule architecture in all three groups (PBS:58.8±1.2 AU, \( n=57 \) cells from three animals, MCT:61.2±1.7 AU, \( n=40 \) cells from three animals, MCT-Colch:60.2±1.3 AU, \( n=40 \) cells from three animals) (F). (*) indicates significantly different from PBS and (#) indicates significantly different as compared to MCT rats as determined by one-way ANOVA with Tukey post-hoc analysis. Scale bar: 5 \( \mu \)m.
Figure S4. Colchicine treatment leads to a nonsignificant reduction in mortality. Mortality-rates at study completion: PBS:0%, MCT:29%, and MCT-Colch:12%, $p=0.13$. 