You cannot fix it if it is not there - Left bundle branch block by echocardiography

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A significant activation delay of the left ventricle (LV) such as in the presence of a true left bundle branch block (LBBB) may cause severe deterioration of LV function. The LV will often contract in a characteristic opposing wall motion of stretch and shortening between early and late activated regions - leading to activation delay induced heart failure. Cardiac resynchronization therapy (CRT) is fundamentally an electrical intervention aimed at solving the activation delay which will simultaneously alleviate the mechanical issues. Despite striking results it is clear that not all patients benefit from CRT and some may even be worsened. One reason is that current selection tools for CRT do not truly reflect the substrate for CRT. Whether by echo or ECG selection tools should reflect our understanding of physiology. This presentation will address recently proposed criteria based on 2D-strain echocardiography to identify true LBBB, the association with outcome and correlation to LBBB by ECG.