A Robotic Coronary Program Increases The Number Of Surgical Referrals For Single Vessel Disease

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- **BACKGROUND:** Single vessel disease is routinely treated with PCI. Having a non-sternotomy option to treat LAD disease increases the referrals for MICS CABG.
  METHODS: Since 2007 our group has been utilizing the Davinci robot to approach single vessel disease. We reviewed all isolated CABG cases done at a single institution from Jan 2019 to Nov 2021.
  RESULTS: During the study period 662 isolated CABG procedures were performed at Virtua Our Lady of Lourdes Hospital. 178 (27%) of these were robotic midCAB procedures. There were 3 Re-operative procedures and 4 BIMA procedures that were excluded. Of the remaining 171 robotic CABG procedures, 111 (65%) were hybrid procedures and 60 (35%) were for single vessel disease. Single vessel disease (SVD) accounted for 9% of our total coronary volume during this time-period. Robotic SVD patients were younger (av 65 vs 71). STS like-hospital rate of single vessel disease for 2021 was 3.7%. **CONCLUSIONS:** It is well accepted by surgeons and cardiologists that a LIMA to the LAD is superior to PCI. However, the invasiveness of sternotomy compels interventional cardiologists to pursue PCI in single vessel LAD disease. Having a surgical non-sternotomy option to manage complex LAD can increase the surgical volume of single vessel disease patients.