**SIMPLIFIED TECHNIQUE FOR CORONARY ANGIOGRAPHY IN PATIENTS WITH DEXTROCARDIA WITH SITUS INVERSUS**

**J. Crisafi**1, A. Agarwal2

1Kettering Medical Center/Dayton VA Medical Center, Dayton, OH, USA

2Wright State University School of Medicine/Dayton VA Medical Center, Dayton, OH, USA

**Background:** Dextrocardia with situs inversus is a rare congenital anomaly resulting in mirror-image transposition of the heart and coronary anatomy. Performing coronary angioplasty in patients with dextrocardia presents specific technical challenges infrequently encountered.

**Case:**A 65-year-old female with past medical history of type 2 diabetes mellitus, hyperlipidemia, and known dextrocardia with situs inversus presented with one day of midsternal chest tightness associated with shortness of breath. Patient’s ECG revealed northwest axis deviation with T-wave inversions in V1-V3, I, II, aVL. Troponin I was elevated at 0.064 ng/ml. Patient underwent coronary angiography for ACS via right femoral artery utilizing the “double-inversion technique”. Coronary angiography revealed a hazy 80% stenosis within the distal right coronary artery (RCA) shown in the LAO caudal substituted for the preferred RAO caudal projection (Figure 1). Patient subsequently underwent successful angioplasty.

**Discussion:** The “double-inversion technique” (2005) utilizes the horizontal sweep reverse function to first mirror the image and then a degree-to-degree reversal between LAO and RAO. This technique facilitates both familiar image interpretation and eliminates the need to reverse catheter manipulation. Widespread dissemination of the "double-inversion technique" is necessary to increase awareness and improve ease of angioplasty in an otherwise challenging group.

 [](https://files.abstractsonline.com/CTRL/75/5/D2C/1DE/BD7/407/D89/3B7/3B2/35C/00D/AC/g572_1.jpg)