



# Balloon Aortic Valvuloplasty complicated by acute aortic regurgitation

**Marco B Ancona, MD**

*Interventional Cardiology Unit*

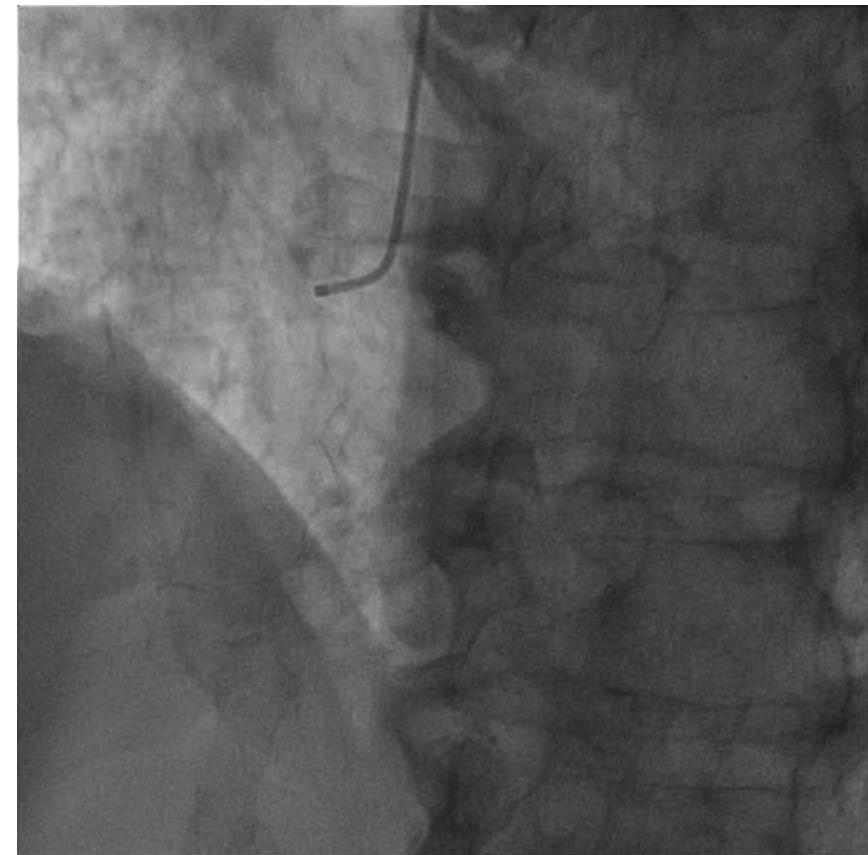
*IRCCS San Raffaele Scientific Institute*

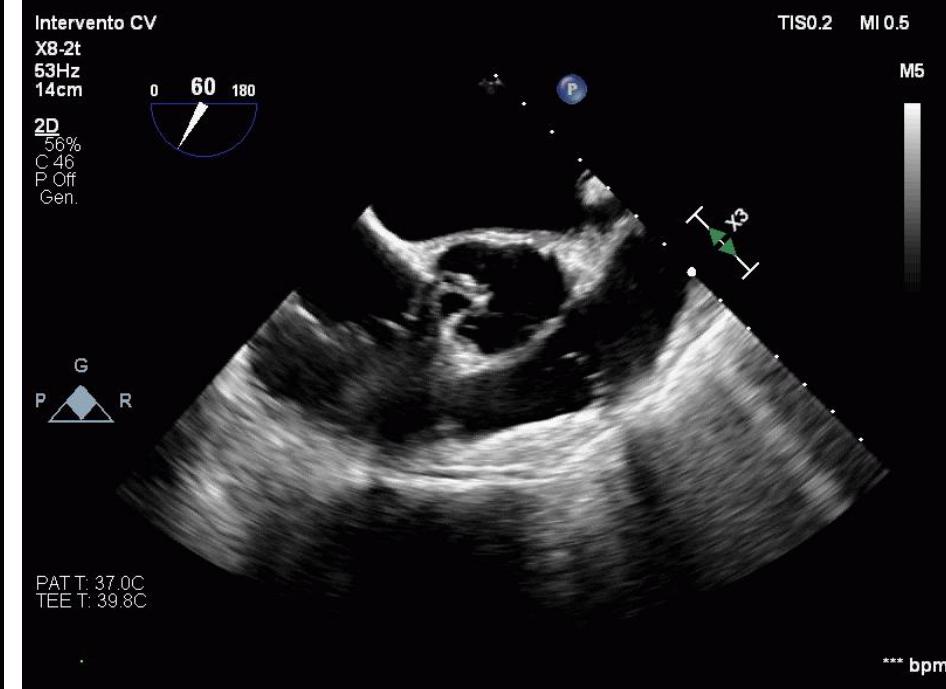
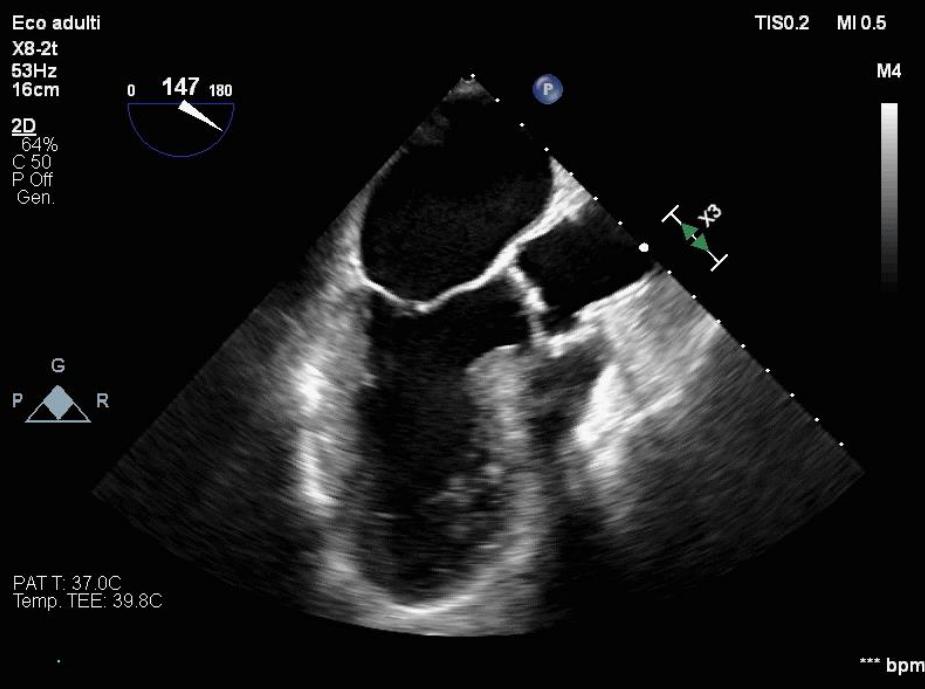
*Milan, Italy*

- Speaker's fees from Abiomed

- **84-year-old gentleman**
- Hypertension, Peripheral vascular disease
- Hospitalization because NSTEMI and heart failure
- Coronary Angiography: Three vessels disease with Left Main involvement
- Echo: severe low flow – low gradient aortic stenosis; LVEF 25%
- Transferred to our center because of Cardiogenic shock

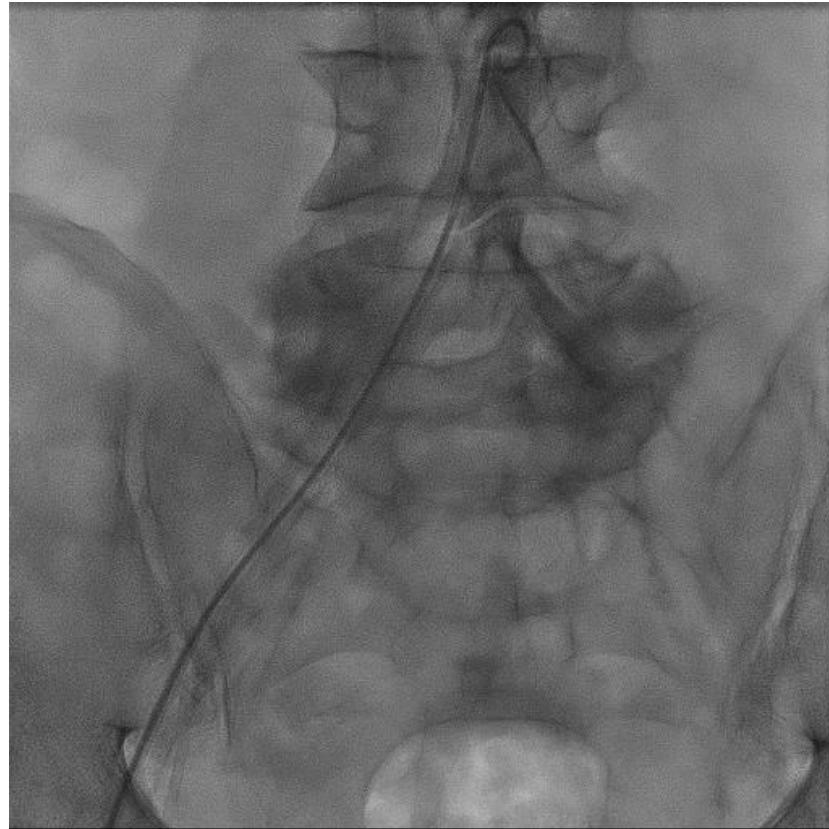
# Coronary angiography



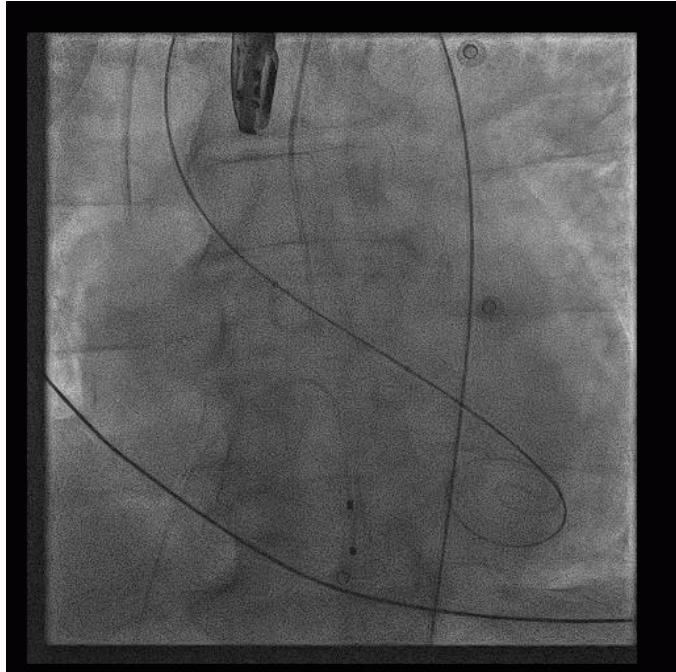


Severe Aortic Stenosis with severe left ventricular dysfunction

Planning: Balloon Aortic Valvuloplasty and PCI

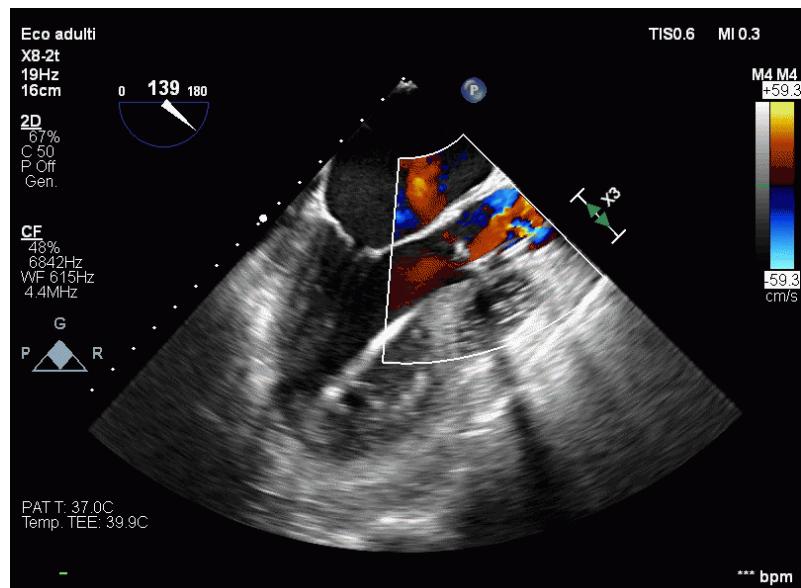
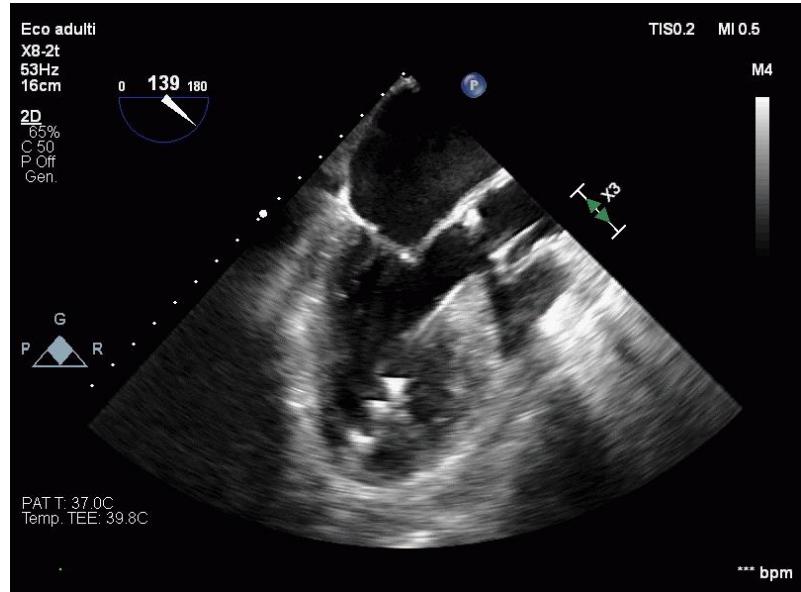


Severe Bilateral Iliac Disease



Balloon Aortic Valvuloplasty  
(18 mm balloon)

Acute Massive Aortic  
regurgitation (cusp rupture) and  
Cardiac arrest



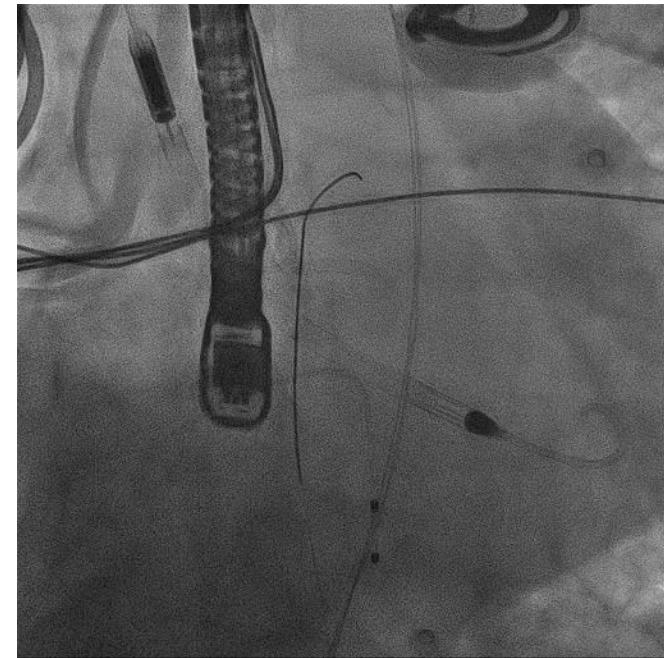
# Bailout Impella Placement during cardiac arrest



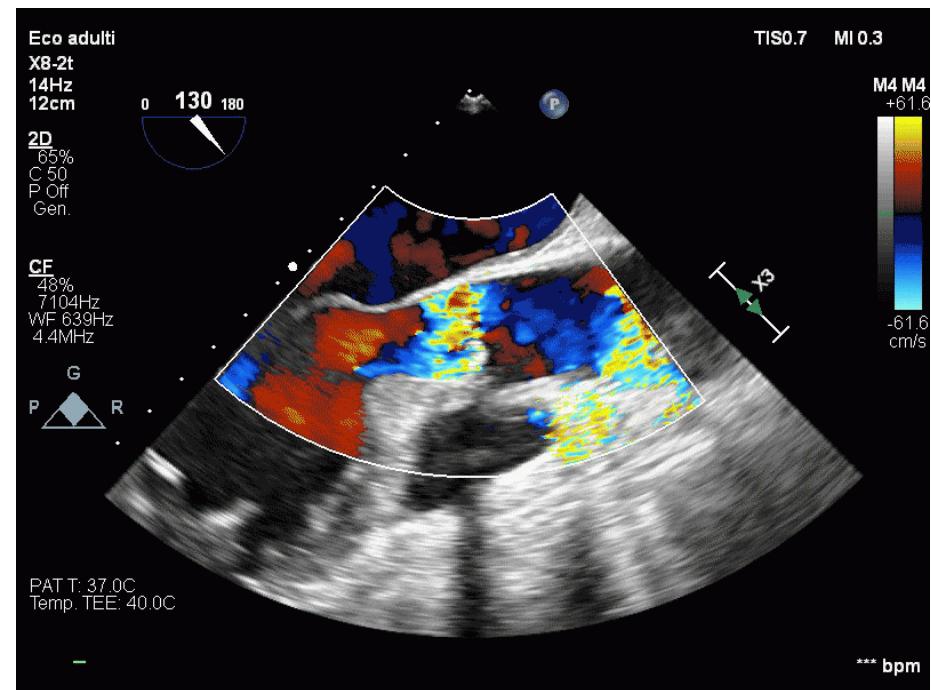
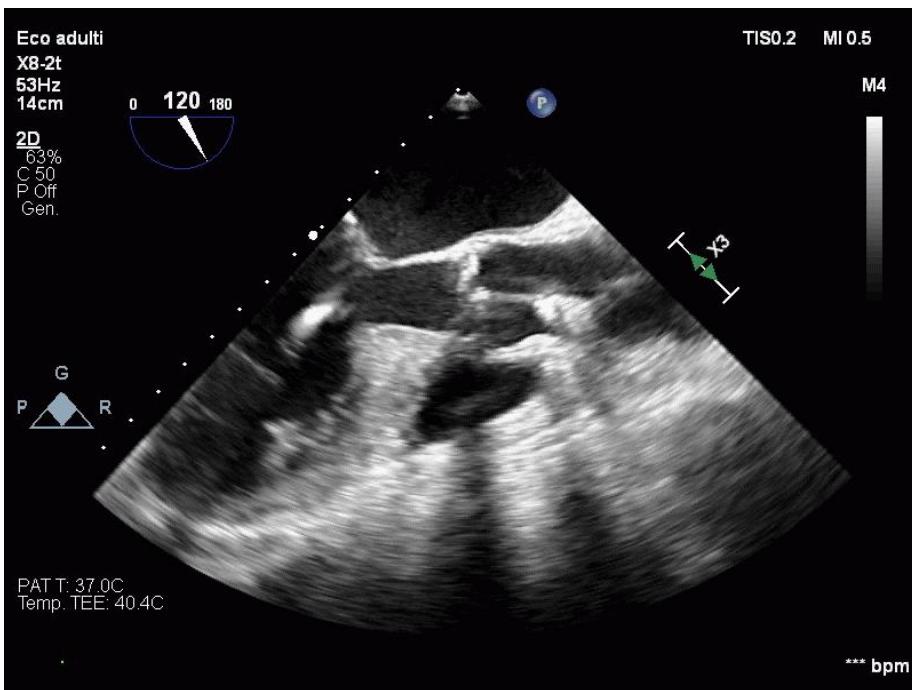
Iliac PTA (8 mm balloon)



Impella CP placement during cardiac arrest



# Bailout Impella Placement during cardiac arrest



Impella was able to vent the left ventricle, thus allowing ROSC  
 Emergent surgical aortic valve replacement + CABG was performed  
 Patient discharged alive from hospital

- Massive aortic Regurgitation can complicate balloon aortic valvuloplasty
- Cardiac arrest can suddenly occur due to left ventricular overload
- **Impella implantation can be a rescue strategy in these cases: it can vent the left ventricle thus allowing rescue of circulation and subsequent aortic valve replacement**