Left Main Ostial Stenosis after Aortic Valve Replacement

Treated with Stenting

Seung-Jung Park, MD, PhD, FACC

Professor of Internal Medicine
Asan Medical Center, *Seoul, Korea*

Incidence of LMCA Ostial Stenosis After AVR

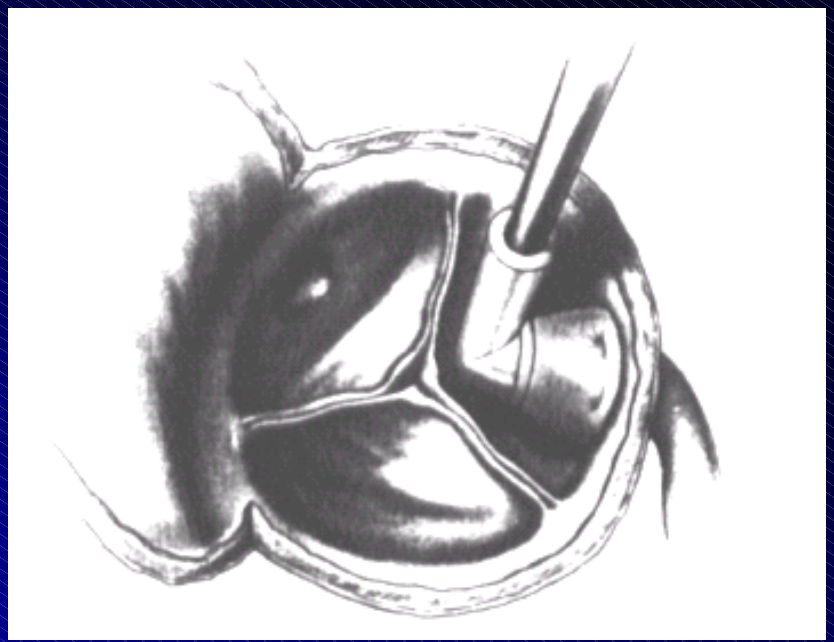
- **The incidence is not known exactly**
- **It has been reported in 1-5% after AVR**
- **However, the incidence may be higher than documented cases in previous reports**
- **Most of cases were treated with bypass surgery**

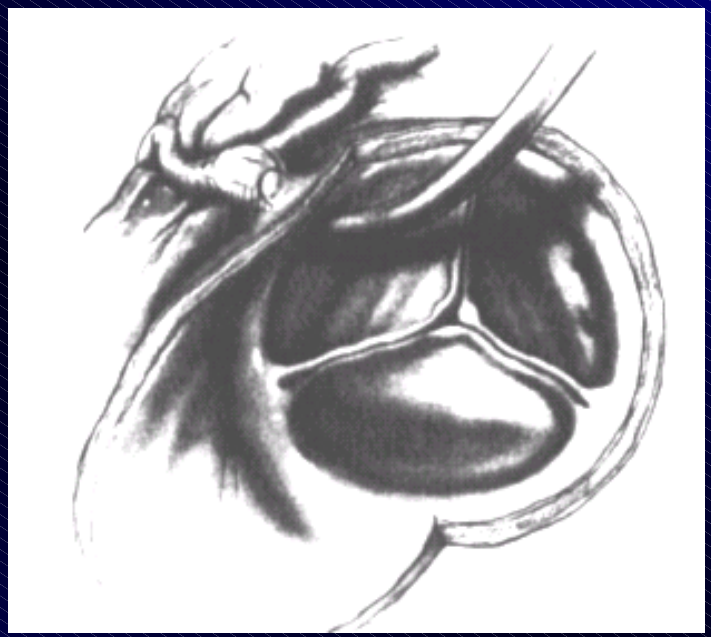
Causes of LMCA Ostial Stenosis After AVR

- **Related to myocardial perfusion technique**
- **Coronary ostial narrowing resulted by inadequate closure technique of prosthetic aortic valve**
- **Coronary ostial closure by prosthetic AV itself**
- **Other unknown causes**

Direct Ostial Myocardial Perfusion during AVR

Antegrade cardioplegia via direct ostial cannulation





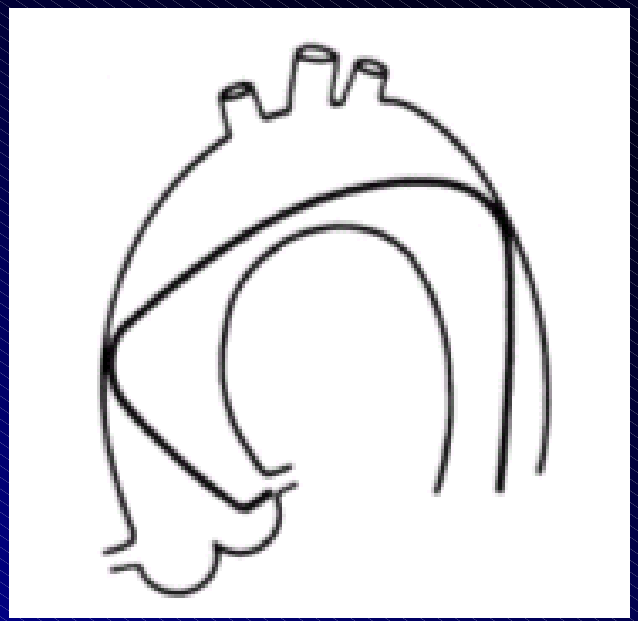
Potentially stimulate intimal hyperplasia

How do we do ?

Ostial lesion after AVR

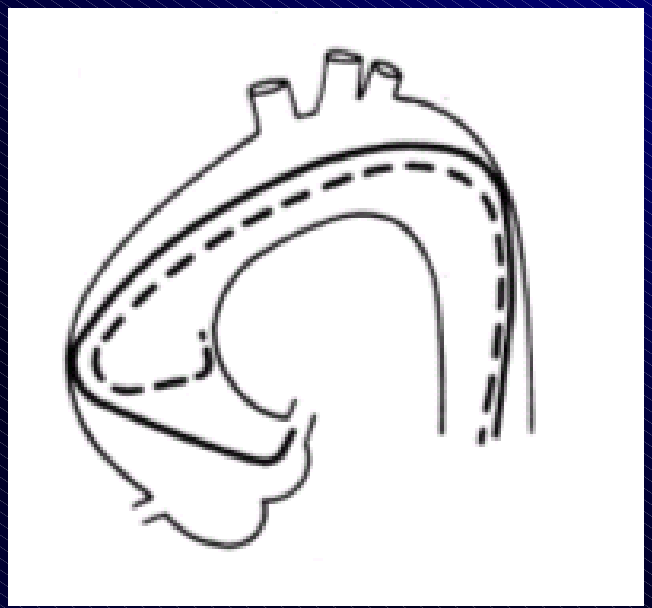
Preferable Guiding Catheters

3.4 cm or 4 cm curve



Normal size aorta

5 cm or 6 cm curve



Dilated aorta due to AV disease

Role of IVUS

- **It is not essential because patients with normal left ventricular function are tolerant to ischemia during balloon occlusion.**
- **However, IABP should be prepared for cases in emergency and with depressed left ventricular function for prevention of hemodynamic collapse.**