WHY USE RADIAL ACCESS FOR CORONARY INTERVENTION

- Increased patient satisfaction
- Increased safety
- Decreased cost to hospital
- Because we can
A BRIEF HISTORY OF RADIAL ACCESS FOR THE WORLD AND FOR US

- 1989 Dr. Lucien Campeau first series of transradial catheterizations
- 1993 Drs. Kiemeneij and Laarman first transradial coronary stents
- 2006 my first introduction to radial access for cath
- NCDR Registry data
  - 2007 1.2% PCI
  - 2012 16% PCI
- Lane Regional and CIS 96%
THE EVOLUTION OF RADIAL ACCESS

- First used as a last resort
  - Pt’s with severe PVD
  - Pt’s with aortic pathology
  - Pt’s with awkward anatomy
  - Brachial access has it’s drawbacks
"RADIAL FIRST" APPROACH

• Physician willing to learn a new approach
  • Appreciate the advantages
  • Willing to learn something new
  • Now trained in radial

• Staff buy-in
  • Learning opportunity
  • Opportunity to lead
  • Opportunity to excel
CHANGES IN ROOM SET-UP, EQUIPMENT, AND PROCESSES

• **Left vs. Right**
  - Most patients right handed.
  - LIMA
  - Catheter positioning
  - Catheter exchanges and working positions.

• **Equipment changes**
  - Hydrophilic sheath
  - Micro puncture
  - ½ size catheter change (L3.5, R3.5)

• **Process changes**
  - Anticoagulation for diagnostic studies (Heparin 50units/kg)
  - Vasodilation
    • Nitro 200-500mcg
    • Verapamil 2.5mg
PATIENT SELECTION AND PREPARATION

• It’s not for everyone
• Adequate ulnar collateral circulation
  • Allen/Modified Allen test (hand blanch/blush)
  • Barbeau method (plethysmography/pulse oximetry)
• Patient preparation
  • Prep at least one groin
  • Explain planned approach and possibility for change to femoral
INCREASED PATIENT SATISFACTION

• Patient can sit up in bed immediately after procedure.
  • Eat after procedure
  • Visit with family
  • CHF, COPD, Back pain
  • Bathroom privileges
• Hemostasis is easier
  • Manual compression
  • Radial band
  • Less pain and vagal response
INCREASED SAFTEY PROFILE
= DECREASED COST

• Less chance of bleeding complication
  • Retroperitoneal bleed
  • Large hematoma
  • Blood transfusion
• Early discharge from hospital or OP center
  • PCI is paid as outpatient procedure
  • Less intensive post procedural care
  • You don’t acquire hospital acquired infections at home
• Diagnostic and interventional equipment is now lower in profile
  • 8fr > 7fr > 6fr > 5fr
• Specialized catheters, sheaths and access tools for radial cath
  • Frenzy of activity to develop new tools
THANK YOU
RADIAL ARTERY INTERVENTIONS
A CATH LAB DIRECTORS PERSPECTIVE

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