Mitra valve repair is superior to replacement in elderly patients with degenerative mitral regurgitation.

Background
- Mitral surgery in elderly patients
- Concomitant procedure
  - Maze, CABS, AVR...
- Complex mitral valvular pathology
  - Frail tissue, valvular calcification, MAC
- Comorbidity
  - Arteriosclerotic disease, CKD, COPD, Frailty
- Short life expectancy
  - Least from benefit of plastic

Mitral surgery in elderly patients
- Objective
  - To assess the outcomes of mitral valve repair (MVP) and replacement (MVR) in elderly patients over 75 years old with degenerative mitral regurgitation.

Methods
- Patients and Method
  - Patients: Consecutive 107 cases between January 2001 and December 2015
  - Exclusion: Emergent Op, Redo

Results
- Patients characteristics
  - MVP: n=66 (62%)
  - MVR: n=41 (38%)

- Pre Op TTE Data
  - Variables
    - LVDs (mm): 54.3 ± 7.2, 54.4 ± 7.6 (n.s)
    - LVDs (mm): 34.7 ± 6.5, 36.6 ± 7.1 (n.s)
    - LAD (mm): 53.1 ± 8.5, 53.9 ± 14.1 (n.s)
    - EF (%): 62.8 ± 10.1, 59.3 ± 10.7 (n.s)
    - EF<40%: 5.10±0.3, 3.9 ± 0.8 (n.s)
    - MR EROA (cm2): 0.47 ± 0.30, 0.41 ± 0.11 (n.s)
    - MR Volume (ml): 70.1 ± 30.2, 62.9 ± 15.5 (n.s)

- Intraoperative findings
  - Variables
    - MVP(n=66) MVR(n=41) P
      - Prolapse lesion
        - Posterior leaflet: 38 (58%) 10 (24%) <0.01
        - Anterior leaflet: 14 (21%) 18 (44%) 0.01
        - Commisures: 7 (11%) 1 (2%) n.s.
        - Anterior + Posterior: 7 (11%) 12 (29%) 0.03
      - Technique of plastic
        - Mitrocompetence: 35 (53%) -
        - McGoons plication: 1 (1%) -
        - Chordal reconstruction: 14 (21%) -
        - Edge-to-edge: 7 (11%) -
        - Resection and chordal reconstruction: 6 (9%) -
        - Annuloplasty: 65 (98%) -
      - Valve
        - Tissue valve: - 38 (93%) -
        - Mechanical valve: - 3 (7%) -

- Intraoperative outcomes
  - Variables
    - MVP(n=66) MVR(n=41) P
      - Op time (min) 287±53 311±80 n.s.
      - CPB time (min) 154±38 165±53 n.s.
      - ACC time (min) 120±40 132±41 n.s.
      - + a procedure TAP 35 (54%) 26 (63%) n.s.
        - Maze 21 (32%) 9 (22%) n.s.
        - CABG 12 (29%) -
        - AVR 11 (17%) 11 (27%) n.s.
        - TVR 0 (0%) 2 (5%) n.s.

- Post Op TTE Data
  - Variables
    - MVP(n=66) MVR(n=41) P
      - LVFR (mm): 54.3 ± 7.2, 54.4 ± 7.6 (n.s)
      - LVDs (mm): 34.7 ± 6.5, 36.6 ± 7.1 (n.s)
      - LAD (mm): 53.1 ± 8.5, 53.9 ± 14.1 (n.s)
      - EF (%): 62.8 ± 10.1, 59.3 ± 10.7 (n.s)
      - EF<40%: 5.10±0.3, 3.9 ± 0.8 (n.s)
      - MR EROA (cm2): 0.47 ± 0.30, 0.41 ± 0.11 (n.s)
      - MR Volume (ml): 70.1 ± 30.2, 62.9 ± 15.5 (n.s)

- Long term outcomes
  - Freedom from Moderate MR in MVP
    - 99%@5years
    - 91%@5years
  - Freedom from SVD in MVP
    - 99%@5years
    - 91%@5years

- Conclusions
  - MVP is a safe and more effective option even for elderly patients with degenerative MR.
  - Long-term outcomes in MVP were better than those in MVR and freedom from congestive heart failure was less in MVP than in MVR.
  - MVP is a safe and more effective option even for elderly patients with degenerative MR.