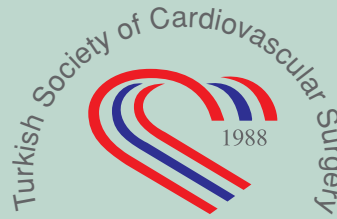


# SMALL AORTIC ANNULUS



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# 1) PREOPERATIVE DATA

| Demographic |                |  |  |
|-------------|----------------|--|--|
|             | Name-ID        |  |  |
|             | Age            |  |  |
|             | Sex            |  |  |
|             | Weight         |  |  |
|             | Height         |  |  |
|             | BMI            |  |  |
|             | Center name    |  |  |
|             | Operation date |  |  |

BMI: Body mass index.

| Comorbidities |                                |                              |                             |  |
|---------------|--------------------------------|------------------------------|-----------------------------|--|
|               | Diabetes mellitus              | Yes <input type="checkbox"/> | No <input type="checkbox"/> |  |
|               | Hypertension                   | Yes <input type="checkbox"/> | No <input type="checkbox"/> |  |
|               | Coronary artery disease        | Yes <input type="checkbox"/> | No <input type="checkbox"/> |  |
|               | Previous stroke                | Yes <input type="checkbox"/> | No <input type="checkbox"/> |  |
|               | Previous myocardial infarction | Yes <input type="checkbox"/> | No <input type="checkbox"/> |  |
|               | Atrial fibrillation            | Yes <input type="checkbox"/> | No <input type="checkbox"/> |  |
|               | Chronic kidney disease         | Yes <input type="checkbox"/> | No <input type="checkbox"/> |  |
|               | COPD                           | Yes <input type="checkbox"/> | No <input type="checkbox"/> |  |
|               | NYHA Class                     | 1, 2, 3, 4                   |                             |  |
|               | STS score                      |                              |                             |  |

COPD: Chronic obstructive pulmonary disease; NYHA: New York Association; STS: Society of Thoracic Surgeons.

| Diagnostic Methods and Findings |                                     |                              |                             |  |
|---------------------------------|-------------------------------------|------------------------------|-----------------------------|--|
|                                 | Cardiac computed tomography         | Yes <input type="checkbox"/> | No <input type="checkbox"/> |  |
|                                 | Transthoracic echocardiography      | Yes <input type="checkbox"/> | No <input type="checkbox"/> |  |
|                                 | 3D Transesophageal echocardiography | Yes <input type="checkbox"/> | No <input type="checkbox"/> |  |

| Measurements with Computed Tomography |                                   |                              |                             |
|---------------------------------------|-----------------------------------|------------------------------|-----------------------------|
|                                       | Mean aortic annulus diameter      | .....mm                      |                             |
|                                       | Minimal aortic annulus diameter   | .....mm                      |                             |
|                                       | Maximum aortic annulus diameter   | .....mm                      |                             |
|                                       | Aortic annulus area               | .....mm <sup>2</sup>         |                             |
|                                       | Aortic annulus perimeter          | .....mm                      |                             |
|                                       | Severe aortic valve calcification | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
|                                       | LMCA distance                     | .....mm                      |                             |
|                                       | RCA distance                      | .....mm                      |                             |
|                                       | Sinotubular junction diameter     | .....mm                      |                             |
|                                       | Sinus Valsalva diameter           | .....mm                      |                             |
|                                       | Ascending aorta diameter          | .....mm                      |                             |
|                                       | Presence of porcelain aorta       | Yes <input type="checkbox"/> | No <input type="checkbox"/> |

LMCA: Left main coronary artery; RCA: Right coronary artery.

| Measurements with Echocardiography |                                       |                              |                             |
|------------------------------------|---------------------------------------|------------------------------|-----------------------------|
|                                    | LVEF                                  |                              |                             |
|                                    | Mean aortic gradient                  | .....mmHg                    |                             |
|                                    | Maximum aortic gradient               | .....mmHg                    |                             |
|                                    | Aortic valve area                     | .....cm <sup>2</sup>         |                             |
|                                    | Severity of aortic regurgitation      |                              |                             |
|                                    | Bicuspid aortic valve                 | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
|                                    | SPAP                                  | .....mmHg                    |                             |
|                                    | Presence of other valve regurgitation |                              |                             |
|                                    | LVEDV                                 | .....mL                      |                             |
|                                    | LVESV                                 | .....mL                      |                             |

LVEF: Left ventricular ejection fraction; SPAP: Systolic pulmonary artery pressure; LVEDV: Left ventricle end diastolic volume; LVESV: Left ventricle end systolic volume.

## 2) PERIOPERATIVE DATA

| Procedure |             |                              |                             |                                                                                                                                  |
|-----------|-------------|------------------------------|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------|
|           | TAVR        | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Transfemoral approach<br>Transaortic-transcarotid approach<br>Balloon-expandable type<br>Self-expandable type<br>Valve size (mm) |
|           | SAVR        | Yes <input type="checkbox"/> | No <input type="checkbox"/> | With stent<br>No stent<br>Sutureless<br>Root enlargement yes no<br>Anterior or posterior<br>Valve size (mm)                      |
|           | AVNeo-Ozaki | Yes <input type="checkbox"/> | No <input type="checkbox"/> |                                                                                                                                  |

AVNeo: Aortic valve neocuspidization; TAVR: Transcatheter aortic valve replacement; SAVR: Surgical aortic-valve replacement.

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### 3) POSTOPERATIVE DATA

| Outcomes |                               |                              |                             |  |
|----------|-------------------------------|------------------------------|-----------------------------|--|
|          | Successful valve implantation | Yes <input type="checkbox"/> | No <input type="checkbox"/> |  |
|          | Need for second valve         | Yes <input type="checkbox"/> | No <input type="checkbox"/> |  |
|          | Coronary obstruction          | Yes <input type="checkbox"/> | No <input type="checkbox"/> |  |
|          | Cardiac tamponade             | Yes <input type="checkbox"/> | No <input type="checkbox"/> |  |
|          | Rupture annulus               | Yes <input type="checkbox"/> | No <input type="checkbox"/> |  |
|          | Any vascular complications    | Yes <input type="checkbox"/> | No <input type="checkbox"/> |  |

| Follow-up |                                    |                              |                             |  |
|-----------|------------------------------------|------------------------------|-----------------------------|--|
|           | Aortic regurgitation               | Yes <input type="checkbox"/> | No <input type="checkbox"/> |  |
|           | Death                              | Yes <input type="checkbox"/> | No <input type="checkbox"/> |  |
|           | Stroke                             | Yes <input type="checkbox"/> | No <input type="checkbox"/> |  |
|           | Myocardial infarction              | Yes <input type="checkbox"/> | No <input type="checkbox"/> |  |
|           | Life threatening hemorrhage        | Yes <input type="checkbox"/> | No <input type="checkbox"/> |  |
|           | New onset atrial fibrillation      | Yes <input type="checkbox"/> | No <input type="checkbox"/> |  |
|           | New onset left bundle branch block | Yes <input type="checkbox"/> | No <input type="checkbox"/> |  |
|           | Need for pacemaker                 | Yes <input type="checkbox"/> | No <input type="checkbox"/> |  |
|           | Infective endocarditis             | Yes <input type="checkbox"/> | No <input type="checkbox"/> |  |
|           | Aortic valve reintervention        | Yes <input type="checkbox"/> | No <input type="checkbox"/> |  |
|           | Heart failure                      | Yes <input type="checkbox"/> | No <input type="checkbox"/> |  |

| Echocardiographic Measurements |                                       |                              |                             |  |
|--------------------------------|---------------------------------------|------------------------------|-----------------------------|--|
|                                | LVEF                                  |                              |                             |  |
|                                | Mean aortic gradient                  | .....mmHg                    |                             |  |
|                                | Maximum aortic gradient               | .....mmHg                    |                             |  |
|                                | Aortic valve area                     | .....cm <sup>2</sup>         |                             |  |
|                                | Severity of aortic regurgitation      |                              |                             |  |
|                                | SPAP                                  | .....mmHg                    |                             |  |
|                                | Presence of other valve regurgitation | Yes <input type="checkbox"/> | No <input type="checkbox"/> |  |
|                                | LVEDV                                 | .....mL                      |                             |  |
|                                | LVESV                                 | .....mL                      |                             |  |

LVEF: Left ventricular ejection fraction; SPAP: Systolic pulmonary artery pressure; LVEDV: Left ventricle end diastolic volume; LVESV: Left Ventricle end systolic volume.