Long-term Coronary Problems in Adult Patients after Kawasaki Disease

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Nationwide Survey of KD in Japan

fatality
Incidence of Coronary Artery Lesions

![Graph showing the incidence of coronary artery lesions over time. The graph plots the percentage of acute and sequelae events from 1997-1998 to 2009-2010, with a significant decrease in occurrence over the years.]
Morphology of coronary aneurysm changes by aging
Fate of Coronary Aneurysm in KD

Prognostic Factors of Coronary Aneurysms

Risk factors:
* Size of aneurysm >8mm in diameter
* Shape of aneurysm large diffuse or saccular type
* Fever >3 weeks
* Treatment, steroid > aspirin
* Age > 2 yrs
Long-Term Prognosis of Patients With Kawasaki Disease Complicated by Giant Coronary Aneurysms
A Single-Institution Experience

Survival Rate (%)

Time after the onset (years)

Time (years) | 5  | 10 | 15 | 20 | 25 | 30
---|---|---|---|---|---|---
# at Risk    | 70 | 66 | 50 | 38 | 21 | 4
Rate (%)     | 96 | 95 | 90 | 88 | 88 | 88

Death
Incidence of Cardiovascular Sequelae Past 15 Years

Dilatation  Aneurysm  Giant An  Valve  Stenosis  MI

Valvular Involvements after Kawasaki Disease

Mitral regurgitation: n=15

Aortic regurgitation: n=4

onset  1 mo  1yr  5yrs  10yrs

Optimal therapeutic strategy

Coronary Bypass ?

or

Catheter Intervention ?
Twenty-Five-Year Outcome of Pediatric Coronary Artery Bypass Surgery for Kawasaki Disease

Rotational Ablation in Kawasaki disease

Free from re-intervention ratio

Akagi T. Korean Circ J 2012
Neoaneurysm formation after PTCA

Pre PTCA  Post PTCA  4 months after  3 years after

Coronary Intervention in Adult KD

- Stiff & calcified lesion
  Rotational Ablation
- Prevention of neoaneurysm formation
  Low-Pressure POBA
  Stent Implantation (optional)
- Most coronary lesions are complex
  Anti-coagulation
- Most coronary lesions are progressive
  Preventive Indication