Emergency TAVI in cardiogenic shock due to severe aortic stenosis
Female/ 87 years old
Chief complain: dyspnea (NYHA IV)
CCU care with intubated state
Comorbidities
- Hypertension
- Diabetes mellitus
- Hx: refusal of surgical AVR or TAVI due to severe AS (2012)
Logistic euroscore: 81.8%
STS score: 58.8%
Severe AS (AVA: 0.41cm²) with heavy calcification
normal global LV systolic function (EF : 55%)

\[ \rightarrow \text{refusal of TAVI} \]
Alert mental state

Discharge against admission at ER
Transferred from other hospital with intubated state about 2 weeks later

Aortic stenosis, severe, AVA 0.41 [16.01.29]
Minimal CAOD - CAOD CT [12.06.13]
HTN
DM
Dyslipidemia

Present illness

환자 최근 들어서 약물 요법을 했고, 이에 따라 2008년부터 흡돌지 않아서 병원 진단 및 관찰 중, 후속 검사를 진행하였습니다.

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@ Bedside TTE

1. Severe AS with heavy calcification
2. Moderate global hypokinesia
3. Decreased LV systolic function (LVEF visually estimated 30~40%)
4. Eccentric LVH
The patient family were still reluctant to any intervention
At 3rd injection, coronary perfusion decreased....
Progress: cardiogenic shock

BP: 40/30 mmHg → CPR for 6 minutes → BP: 90/60 mmHg
There were no information of TEE, Cardiac CT and peripheral angiography at the time of diagnostic coronary angiography.

1. Continued supportive care until elective TAVI

2. Emergent balloon valvuloplasty

3. Emergency TAVI
Balloon valvuloplasty (20mm)  Aortogram
Emergent TAVI without guidance of TEE and information of cardiac CT (2016-02-19)

EvolutR (26mm)
Time duration from CPR to the end of emergent TAVI = 30 minutes
Final pressure gradient
Echocardiography

Severe AS (AVA 0.37 cm²) by C.E
LVEDD/ESD 54/43 mm, EF 48%
Pre-TAVI (2016.2.15)

AVA 2.96 cm² by C.E
LVEDD/ESD 48/33 mm, EF 57%
Post-TAVI (2016.4.8)
Echocardiography

Severe AS (AVA 0.37 cm$^2$) by C.E
Pre-TAVI (2016.2.15)

AVA 2.96 cm$^2$ by C.E
Perivalvular AR (Gr I-II) at LCC side
Post-TAVI (2016.4.8)