

성인 대동맥축착의 대동맥 풍선성형술 1예

정진옥 · 김윤철 · 성보영 · 김준경 · 정준용
류정곤 · 최시완 · 성인환 · 전은석

= Abstract =

A Case Report of Balloon Angioplasty for Coarctation of Aorta in Adult

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For the treatment of coarctation of aorta, surgical intervention has been known as a standard therapy. During last decade balloon angioplasty for coarctation of the aorta has been reported as a successful and safe procedure in about 300 cases. This angioplasty was done mainly in infants and children, and little cases in adults and adolescents.

A 22 year-old adult with coarctation of aorta have recieved balloon angioplasty. He visited to emergency room due to severe headache and the blood presure of arm was 240/130mmHg at emergency room. The blood pressure at ward was 168/92mmHg in upper extremities, 104/82mmHg in lower extrimities. His aortogram showed coarctation of thoracic aorta below left subclavian artery. The pressure gradient between ascending aorta and right femoral artery was decreased from 60mmHg to 0mmHg after balloon dilatation(2 times, balloon diameter 18mm). There were no significant complications. The follow-up magnetic resonance image in 4 month after balloon angio-plasty showed no evidence of restenosis or saccular aneurysm. Initial hypertension turned to normal blood pressure in 4 months after balloon angioplasty. This adult case of successful balloon angio-plasty for coarctation of aorta is the first case reported in Korea.

KEY WORDS : Coarctation of aorta · Balloon angioplasty.

foord Nylin¹⁾

서 론

가 segmental tubular

hypoplasia

40

1945 Cra -

- 677 -

2-4).

1982 Singer

5-8). Sanjay Tyagi 7)

22.6 35
26 1

가 , 2

1990 15

가

9),

1

증 례

: , 22 .

: ().

: 5

1

가

240/
130mmHg, 80 / , 20 / , 36.

5

168/92mmHg, 164/92mmHg,
104/82mmHg, 104/82mmHg

:
15mg/dl, 42.8%,
6100/mm³, 162,000/mm³

6.7g/dl, 4.2g/dl,
AST 51 IU/L, ALT 29 IU/L Alkaline - phspatase
144 IU/L, BUN 5.1mg/dl, Creatinine 0.9mg/dl, Na⁺
145mEq/L, K⁺ 4.5mEq/L, Cl⁻ 109mEq/L AST
가

: X - rib notching

1.5cm

focal, segmental luminal narrowing

, DSA 3.7mm

(Fig. 1). inte -

rnal thoracic a, thyrocervical trunk, costocervical
trunk가

:
7F pigtail catheter

heparin 5,000units

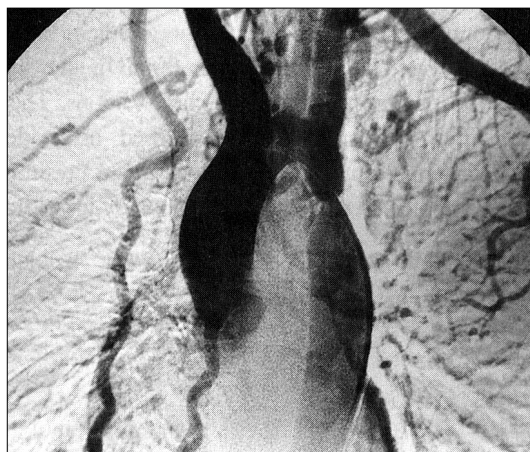


Fig. 1. Aortogram showed coarctation of thoracic aorta below left subclavian artery and collateral vessels such as internal thoracic artery, thyrocervical trunk, costocervical trunk.

J guide wire(0.032 inch, 145cm)

18mm balloon catheter 2

(Fig. 2).

large vessel balloon catheter(15mm,
30mm, Mansfield)

morphine

. 50%

60mmHg

inflation

indentation

가

(Fig. 3).

deflation

inflation deflation

140/70mmHg,

136/74mmHg

130/68mmHg,

124/64mmHg

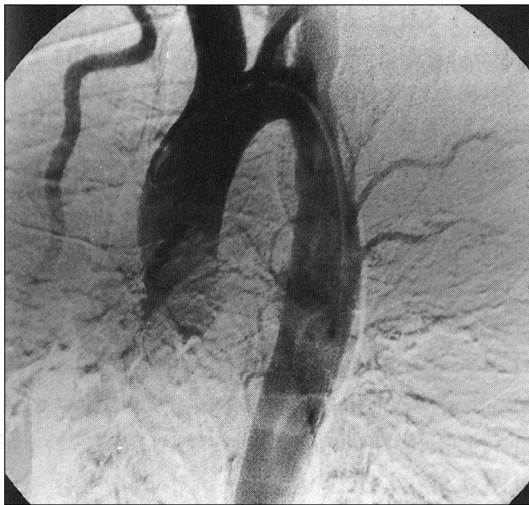


Fig. 2. Aortogram after balloon angioplasty showed no residual coarctation.



Fig. 4. Follow-up magnetic resonance image, 4 months after balloon angioplasty showed no restenosis and no saccular aneurysm.

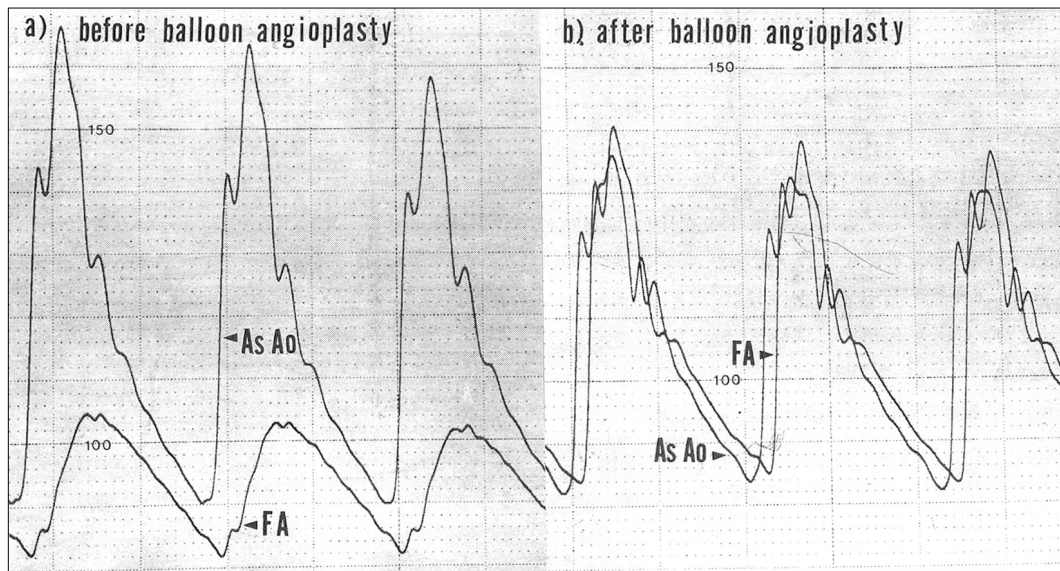


Fig. 3. The Pressure gradient between ascending aorta and femoral artery disappeared(60mmHg to 0mmHg) after single balloon angioplasty(a : double pressure tracing between ascending aorta and femoral artery, before balloon angioplasty. b : double pressure tracing after balloon angioplasty.). As Ao : ascending aorta, FA : femoral artery.

4 Suarez ¹³⁾ 4
5 16 10
(Fig. 4), 1 (6%) 가
고 안 controlled injury 가 1
가 segmental tubular tation (uncontrolled damage)
hypoplasia 가
5 9% 0.4 가
2% 10) 13
31% 6,14,15) 16)
71.4%
(older children, young adults)
13,17) Rao ¹⁸⁾ 1
, aortic isthmus 가
3.5mm
6mm 4가
가
가 Sanjay Tyagi ⁷⁾
22.6 35
26 1
가 2 가 가
6%
46% 가
22
300

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