

경피적 혈관 성형술로 치료한 Takayasu 동맥염 1례

김현부 · 조병수 · 차성호 · 오주형* · 윤 업*

= Abstract =

A Case of Takayasu's Arteritis :
Managed with Percutaneous Transluminal AngioplastyHyeon-Bu Kim, M.D., Byoung-Soo Cho, M.D., Sung Ho Cha, M.D.,
Joo-Hyung Oh, M.D.,* Yup Yoon, M.D.*Departments of Pediatrics and Radiology,* College of Medicine, Kyung-Hee University,
Seoul, Korea

Takayasu's arteritis is a chronic vasculitic disease of the aorta, its major branches and the pulmonary arteries, resulting in stenosing, occlusive or aneurysmal lesion. While the precise etiology of Takayasu's disease is unknown, an autoimmune mechanism or active tuberculous inflammation have been suggested. It is more common in young oriental women but has a rare incidence in children.

We experienced a case of Takayasu arteritis type in an 8 years old girl. The diagnosis was made by physical examination and digital subtraction aortography(DSA) which showed narrowing of left common carotid artery, right subclavian artery and left renal artery. The perfusion defect at posterior segment of right upper lobe was noted in lung perfusion scan. Medical treatment and percutaneous transluminal angioplasty(PTA) were performed.

In addition to case report, a brief review of literature was added.

KEY WORDS : Takayasu arteritis · Percutaneous transluminal angioplasty(PTA).

서 론

Takayasu

70%

7)

1,2)

가

3)

4,5)

9.0g/dl, 4.7g/dl,
 SGOT 20U/L, SGPT 18U/L, BUN 20mg/dl, Crea -
 tinie 0.6 mg/dl, 112mg/dl .
 ANA, ANCA, VDRL, Rheumatoid fa -
 ctor, HBsAg, HBsAb, LE cell CRP
 3+, ASO 1039Todd unit, alpha - 2 - globu - lin
 10.64%, Gamma globulin 9.19% 가
 , 160cmH₂O, RBC,
 WBC 0/ul, protein 22mg/dl, Glucose 83mg/dl,
 Chloride 102mmol/L renin
 19.7ng/ml, Aldosterone 257pg/ml .
 X -
 MRI
 : 2 (Ph -
 enobarbital, Valproic acid), (Enanapril)
 4 Vasc -
 ular Doppler
 150/
 90mmHg, 160/95mmHg
 95 6
 : 11.8g/dl,
 12,500/mm³, 24mm/hr .

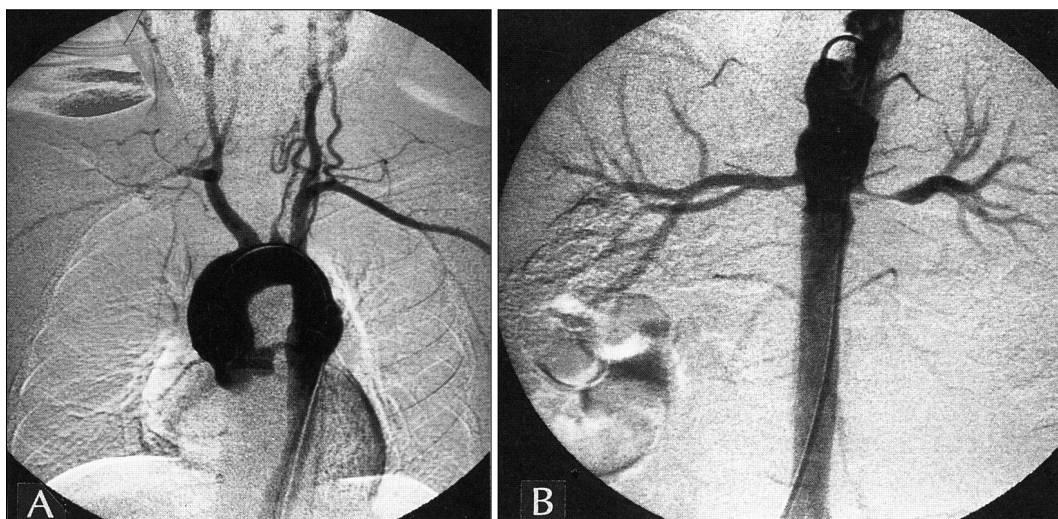


Fig. 1. Aortogram shows diffuse narrowing of left common carotid artery and right subclavian artery(A), and left renal artery(B).

(Fig. 1) Takayasu

(Fig.

2).

Tak -

ayasu

고 안

(Fig. 3).

Takayasu

120/80mmHg

11

1,2)

, 1908 Takayasu⁸⁾가 가
가

15 45

가 2.8¹⁰⁾, 1 : 1.4³⁾ 1 : 8⁹⁾, 1 :
1 : 4.9
3,6,11,12)
가

가

5)

(SLE),
가, ANA, Rheumatoid factor, LE cell
2 - 가 ,

가 13)
HLA BW 52¹⁴⁾
HLA B5, B21
3)

Oota(1940)¹⁵⁾ 가

Type :

Type :

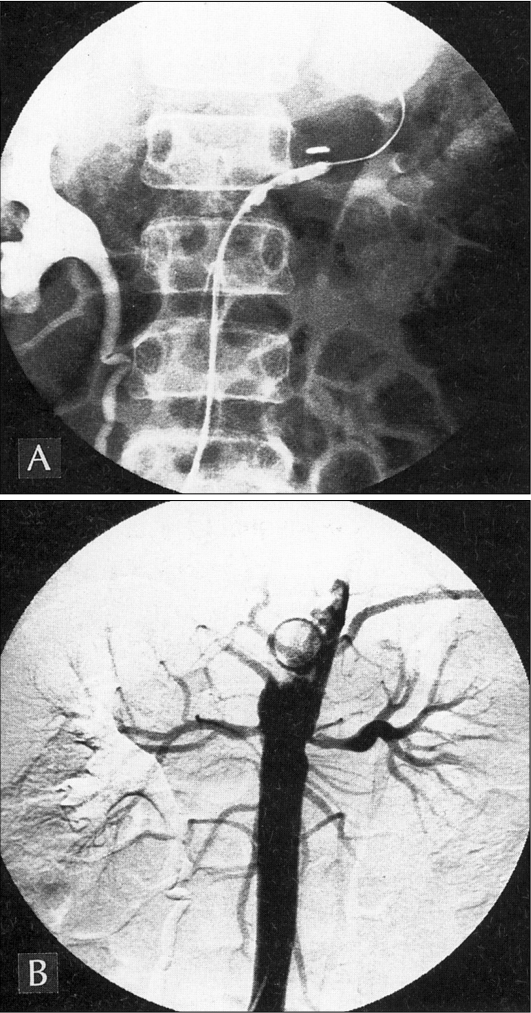
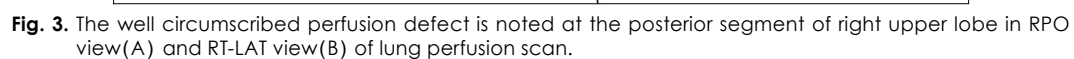


Fig. 2. Percutaneous transluminal balloon angioplasty was done at the narrowing site of left renal artery(A), and well figured out the renal artery after angioplasty(B).



MR 18,19)

MR

Takayasu

7)

Strachan 17)

가 가

captopril

⁶⁾가 . 가 가

C -

X ,

22) 가

14)

(INH)

가

Khalilullah 21)
 Takayasu 22,23)
 , 가 24)
 가 20mmHg
 70%
 가
 20 30%
 가 10mmHg 23)
 가
 7%²⁵⁾ 60%²⁶⁾ 5
 27,28)
 요 약
 Takayasu Type 8
 1

References

- 1) Das JP, Padhee B, Mishra A, Baait MA, Nayak CR & Swain V : *Nonspecific aortio-arteritis*. *Indian Heart Journal* 34 : 391-385, 1882
- 2) Yamato M, Lecky JW, Hiramatsu K & Kihda E : Takayasu's arteritis : *radiographic and angiographic findings in 59 patients*. *Radiology* 161 : 329-334, 1886
- 3) Rose S, Mehra NK, Kumar R : *Vaidya MC (1991) HLA-B5 and B21 antigens in aortoarterites*. *Indian J Pediatr* 58 : 85-89
- 4) 정봉준 · 하만철 · 김용준 · 김찬영 : Takayasu 동맥염 1례. *소아과* 29 : 1007-1013, 1986
- 5) Pantell RH, Goodman BW, Jr : Takayasu' arteritis : *The relationship with Tuberculosis*. *Pediatrics* 67 : 84-88, 1981
- 6) 홍창의 · 홍영진 · 윤용수 · 한만청 · 이근수 · 손근찬 : 소아의 다카야스동맥염. *대한의학협회지* 27 : 431-437, 1984
- 7) Ichiro Yamada, Fujio Numano, Soji Suzuki : *Takayasu Arteritis : Evaluation with MR Imaging* : *Radiology* : 188 : 89-94, 1993
- 8) Takayasu M : *Case with unusual changes of the central vessels in retina*. *Acta Soc Ophthalmol Jap* 12 : 554, 1908 (cited from reference 13)
- 9) Koide K : *Aortitis syndrome*. *Nihon Rhinshyo (Japan)* 43 : 2102-2107, 1985
- 10) Zheng D, Lie L, Fan D : *Clinical studies in 500 patients with aorto arterites*. *Chin Med J* 103 : 536-540, 1990
- 11) Jae Hyung Park, Man Chung Han, Seung Hyup Kim, Byung Hee Oh, Young Bae Park, Jung Done Seo : *Takayasu arteritis : Angiographic findings and results of angioplasty*. *AJR* 153 : 1069-1074, 1989
- 12) 박병규 · 손세정 · 노정일 · 윤용수 · 홍창의 · 윤경모 · 김인원 : Takayasu 동맥염의 경피적 혈관조영술 4례. *소아과* 30 : 441-449, 1987
- 13) Wiggelinkhuizen J, Cremin BJ : *Takayasu arteritis and renovascular hypertension in children*. *Pediatrics* 62 : 209-217, 1978
- 14) Chang Yee Hong, Yang soo Yun, Sung Ho Cha, et al : *Takayasu arteritis in Korean children : clinical report of seventy cases*. *Heart Vessels Suppl* 7 : 91-96, 1992
- 15) Oota K : *Ein Seltener Fall von Veiderseitigem Carotis-subclavianvchluss*. *Trans Soc Path Jap* 30 : 680, 1940
- 16) Nakao K, Ikeda M, Kimata S, Nhtani H, Miyahara M, Ishimi Z, Hashiba K, Takeda Y, Ozawa T, Matsushita S and Kuromochi : *Takayasu's arteritis. Clinical report of 84 cases and immunological studies of 7 cases*. *Circulation* 35 : 1141, 1967
- 17) Strachan RW : *The natural history of Takayasu's arteriopathy*. *Quart J Med* 33 : 57, 1964
- 18) Ichiro Yamada, Fujio Numano, Soji Suzuki : *Takayasu arteritis : Evaluation with MR Imaing*. *Radiology* 188 : 89-94, 1993
- 19) Jae hyung Park, Jin Wook Chung, Jung-Gi Im, Sung Kwon Kim, Young Bae Park Man chung Han : *Takayasu Arteritis : Evaluation of Mural change in the aorta and*

- pulmonary artery with CT angiography. *Radiology* 196 : 89-93, 1995
- 20) Austen WG, Shaw RS : *Surgical treatment of pulseless (Takayasu's) disease. N Engl J Med* 270 : 1228-1231, 1964
 - 21) Khalilullah M, Tyagi S, Lochan R, Yadav BS, Nair M, Gambhir Ds, Khanna SK : *Percutaneous transluminal balloon angioplasty of the aorta in patients with aortitis. Circulation* 76 : 597-600, 1987
 - 22) Awazu M, Shimizu M, Mojo H, Osano M, Kohda E : *Percutaneous transluminal angioplasty for renovascular hypertention. Arch Dis Child* 60 : 627-630, 1985
 - 23) Sanjiv Sharma, Anita Saxena, Kewal K, Talwar, Upendra Kaul, SN Mehta, Mira Rajani : *Renal Artery Stenosis caused by Nonspecific Arteritis (Takayasu Disease). American J of Roentgenology* 158 : 417-422, 1992
 - 24) Dong ZJ, Li S, Lu X : *Percutaneous transluminal angioplasty for renovascular hypertension in arteritis : experience in china. Radiology* 162 : 477-479, 1987
 - 25) Warshaw JB, Spach MS : *Takayasu's disease (Primary aortitis) in children, Case report and review of literature. Pediatrics* 35 : 620-626, 1965
 - 26) Hall S, Barr W, Lie JT, Stanson AW, Kazmier FJ, Hunder GG : *Takayasu arteritis. A study 32 north american patients. Medicine* 64 : 89-99, 1985
 - 27) 김요중 · 성상민 · 황경태 · 조성훈 · 신경섭 : 심부전이 동반된 Takayasu 동맥염의 1례 소아과 25 : 682-687, 1978
 - 28) Srinivasa A, Rao K, Ravi Mandalam, Vedula R, Rao, Arun K, Gupta, Santhosh Joseph, Madhavan N, Unni, Raghavan Subramanyan, Kurur S : *Neelakandhan : Takayasu Arteritis : Initial and longterm follow-up in 16 patient after Percutaneous Transluminal Angioplasty of the Descending Thoracic and Abdominal Aorta. Radiology* 189 : 173-179, 1993