

1

:

: 1997 8 1998 8 12 20 가

19

19 , 1

68.4

(:N=11, :N=8),

3

12

CT

:

20

1

Stent graft introducer

가

15 (79%)

4 (2%)

4

2 ,

2

1

6

3

. 3 (16%)

1 ,

가 1 , 1

1

:

가

23%

(4,5,6).

69%

(1).

15mm

30mm

(7,8).

1990

(2,3).

가

가 ,

가

1
2
3
4
5

1999 3 30

1999 8 11

1997 8

1998 8

12

20

가 19 , 가 1 2가 가
62 83 68.4
ASA
(American society of anesthesia)
(Table 1).
A F 6
A: , B:
, C: 가
D: 가 , E:
15mm ()
(5). 가
B,C,E
Vanguard (Boston Scientific,
Oakland, U.S.A.) 가 4
Polyester fibric 4.6
(3 - 12)

Table 1. Associated Risk Factor and ASA Classification of 20 Patients

	Value	%
Risk factor		
CAOD	9	45
Hypertension	5	25
CRF	1	5
Renal allograft	1	5
Hepatitis	1	5
ASA classification		
II	7	35
III	10	50
IV	3	15

CAOD:coronary arterial obstructive disease, CRF:chronic renal failure, ASA:American society of anesthesia

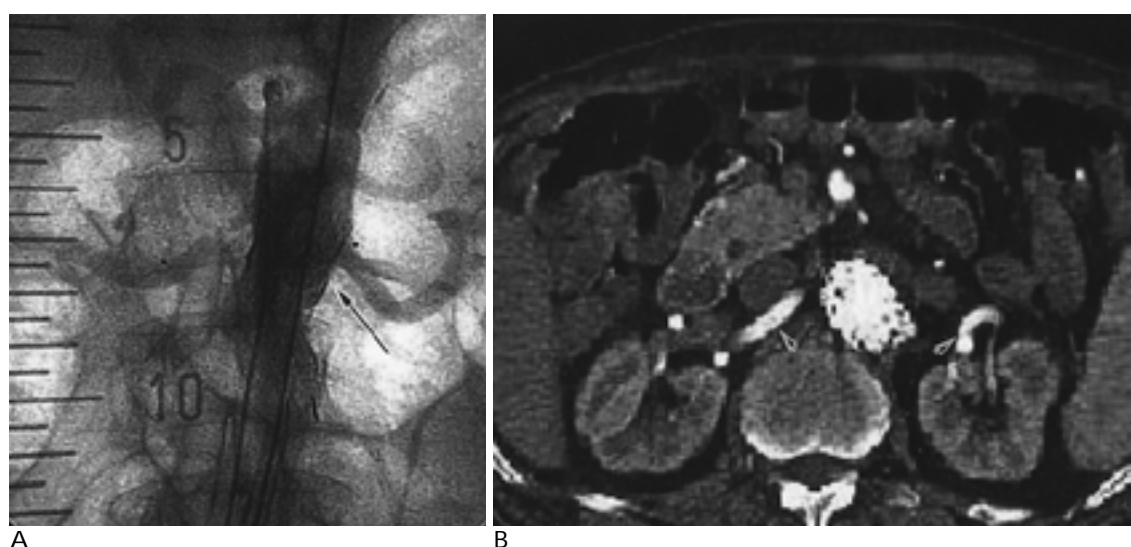


Fig. 1. A 65-year-old man with AAA which has short aortic neck (type E).
A. Aortogram shows juxta renal placement of proximal portion of stent graft (arrow).
B. After 3 month follow up, CT scan shows intact both renal arteries (arrow heads) with juxtarenal placed stent graft.

E 1
12mm 2 1

(Fig. 1). C
4

(Fig. 2). 1

Table 2. Types of Aneurysm and Success Rate after Endovascular Treatment

	No of Patients	No of Success	% of Success Rate
Primary success rate			
B	12	9	
C	4	4	
D	2	1	
E	1	1	
Total	19	15	78
Secondary			
B	12	10	
C	4	4	
D	2	1	
E	1	1	
Total	19	16	84

B:Aneurysms involving aortic bifurcation, C:Aneurysms involving ipsilateral iliac bifurcation, D:Aneurysms involving bilateral iliac bifurcation, E:Aneurysms with short neck less than 15 mm

(Table 2).
3 (16%)

2

3 12
4.6

4

2

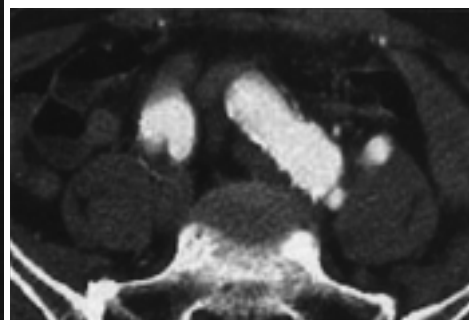
1

(passenger)

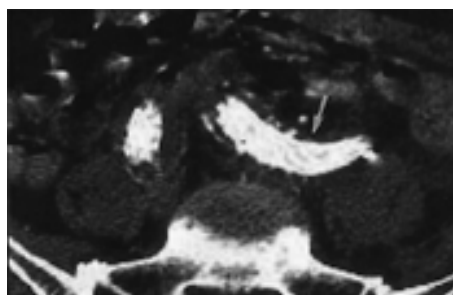
84% (Fig. 3).



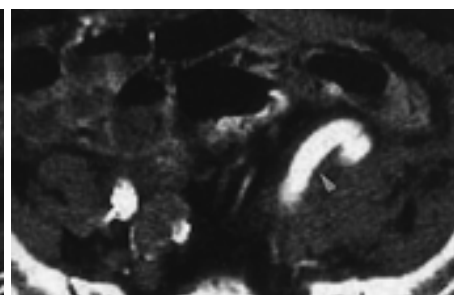
A



B



C



D

Fig. 2. A 72-year-old man with AAA involving bilateral iliac bifurcation (type D).

A. Schema of treatment. Bilateral distal end of stent graft are extended to external iliac arteries with coil embolization of right internal iliac artery and surgical ligation of left internal iliac artery. Graft interposition between the left internal iliac artery and external iliac artery is performed for blood supply to pelvic cavity. (Reproduced with permission from Do Yon Lee. Interventional radiology. Ilchokak 1999;1:314, Figure 24-2)

B. Pre-procedure CT scan shows aneurysmal dilatation at both external iliac artery.

C. Post-procedure CT scan. Stent graft (arrow) is extended to left external iliac artery.

D. Post-procedure CT scan. Graft interposition (arrowhead) between the left internal and external artery is performed for blood supply to pelvic cavity.

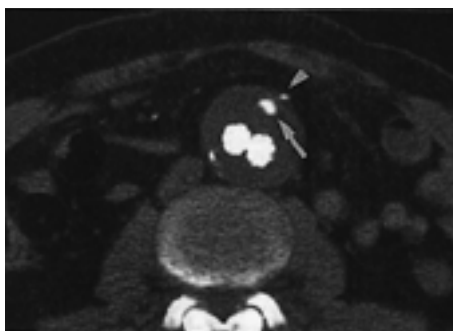
:
 II 가 35%, III 가 50%, IV 가 15%
 , 4-6% (6).
 19 15
 4 1
 가
 Polyester fibric (10 - 14).
 가 154
 0.4%, 가 가 87% 가 가
 (4). 가 가 가
 가 154 가 ASA II (15). 4
 가 18%, III 가 49%, IV 가 32% 22%



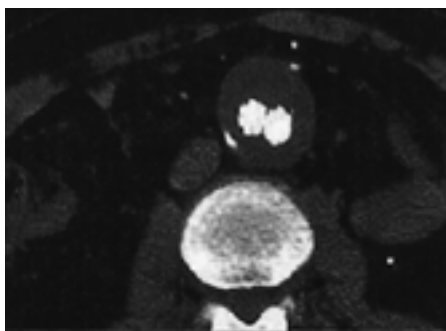
A



C



B



D

Fig. 3. A 68-year-old man with distal perigraft leak after placement of stent graft. (Reproduced with permission from Do Yon Lee. *Interventional radiology*. Ilchokak 1999;1:316, Figure 24-4)

A. Distal perigraft leak from right internal iliac artery is drained to inferior mesenteric artery.

B. After 3 month follow up, post contrast CT scan shows a perigraft leak (arrow) and patent inferior mesenteric artery (arrow head).

C. After coil embolization (arrow) of right internal iliac artery, right distal end of stent graft is extended to external iliac artery.

D. After additional stent graft insertion for treatment of perigraft leak. Complete exclusion of distal perigraft leak is noted.

7% - 34%

40% - 67%

20%

(16, 17).

2

1

가

가 1

2

60

가

15-20mm

(7).

Stephan

(8)

3mm

14mm

가

7

1

1

12mm

가

2

1

1

가

4

50%

2

15mm

1

가

3

12

가

. Mialhe (5)

79

4

2

D

가

(18).

C

4

D

5

4

, 1

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Endovascular Treatment of Abdominal Aortic Aneurysm by Bifurcated Stent Graft¹

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Purpose: To evaluate the effectiveness and safety of endoluminal bifurcated stent graft for the treatment of AAA.

Materials and Methods: Between August 1997 and August 1998, 20 patients with AAA underwent treatment involving the use of a bifurcated stent graft. Fourteen in whom the aneurysm involved only bifurcation and six patients in whom the common iliac arteries were involved. For one patient, a stent with a short proximal neck measuring 12 mm was used. The stent graft was inserted by means of a unilateral surgical femoral arteriotomy. After the procedure, follow up involving CT and aortography was performed between month 3 and month 12.

Results: The primary success rate with the first trial was 79 percent (15 of 19 patients), and the overall success rate was 84 percent; one perigraft leak was successfully corrected. In one case, technical failure occurred due to a tortuous iliac vessel and spasm. Procedure-related complications occurred in 16% of patients (3 of 19), one of whom died due to acute renal failure following a contrast overdose.

Conclusion: Endovascular treatment of infrarenal AAA by means of a bifurcated stent graft was effective and safe. In particular, if the proximal neck measured more than 1cm, any AAA could be treated using a bifurcated stent graft. Further investigation of the outcome and complications arising during long-term follow-up are needed, however.

Index words : Aneurysm, aortic
Aneurysm, therapy
Stents and prostheses

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