

경피적 승모판막확장술도중 경험한 Inoue풍선의 원위부 확장부전 1례

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A Case Report on the Inflation Failure of Distal Portion of Inoue Balloon during Percutaneous Mitral Valvuloplasty in a Patient with Rheumatic Mitral Stenosis

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ABSTRACT

Since Inoue et al introduced a specially designed balloon catheter for percutaneous mitral valvuloplasty (PMV) in 1984, the Inoue balloon catheter has been a popular device for the management of mitral stenosis. During the procedure several fatal complications, such as cardiac tamponade, perforation of a cardiac chamber, atrial septal defect, thromboembolism, mitral regurgitation and death have all been reported in the literature. There have also been several international reports regarding deformities of the Inoue balloon, but few reports in Korea. We recently experienced a case of an inflation failure of the distal portion of the Inoue balloon during a percutaneous mitral valvuloplasty in a 34 year old female patient with a tight mitral stenosis. To the best of our knowledge, a similar deformity of an Inoue balloon has never been reported in Korea. (**Korean Circulation J 2002;32(10):906-910**)

KEY WORDS : Mitral valve stenosis ; Balloon dilatation.

서론

(Percutaneous Mitral Valvuloplasty, PMV)

Inoue¹⁾ 1984 Inoue
: 2002 8 7
: 2002 9 18
: , 422 - 711 2 Inoue
91 - 121
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2)
PMV , X :
, , ,
2-4) , :
(rupture), (inflation deformity), 56 mm
(inflation failure)
가 0.9 cm²
5 ,
PMV Inoue 16.2 mmHg
(inflation failure) 1

임상경과 및 시술방법

중 려
5 Inoue criteria
28 mm가 (PT-
MC-28, Toray Industries)
: 34 , .
: .
: 34
가 pigtail
7
(NYHA functional class III)
guide wire()
Inoue
가 : 28 mm 1 Inoue
: 110/70 mmHg,
76 , 20
(Fig. 1A).
164.0 cm, 58.1 kg
가 Inoue
28 mm Inoue
2 28 mm 1
17.7 mmHg
(opening snap) , 6.2 mmHg . 29 mm 2
(rumbling) . 2
1 6.2 mmHg 4.2 mmHg
: 15.4 g/dL,
44.3%, 7,890/mm³, 307,000/mm³
가
210 mg/dL, 146 mg/dL, (Fig. 1B). 30
145 mg/dL, 35 mg/dL (fluoroscopic time) 6.1
BUN 12 mg/dL, Cr 0.9 mg/dL
PMV 24

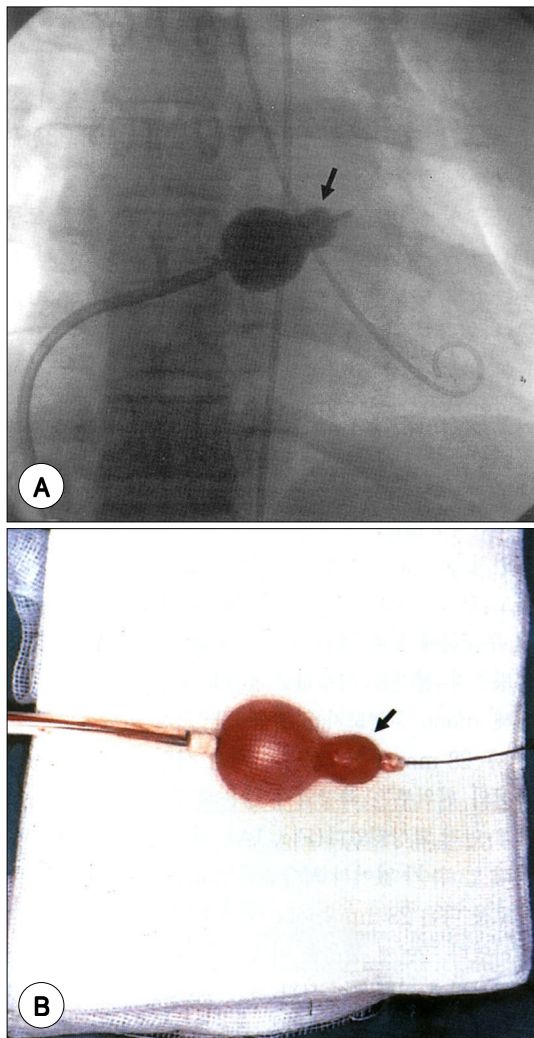


Fig. 1. Inflation failure of the distal portion of Inoue balloon catheter during percutaneous mitral valvuloplasty. Shows that the proximal but not the distal portion (arrow) of Inoue balloon catheter is inflated during in situ inflation at the mitral valve (A). Shows abnormal early inflation of the proximal portion of Inoue balloon catheter during in vitro test inflation. The distal portion (arrow) of Inoue balloon catheter is not inflated (B).

51 mm

1.7 cm²,
1.6 cm²,

6 mmHg

가 NYHA functional Class

고 찰

Inoue
1984 Inoue ¹⁾
Inoue
2)5)6)

Inoue
(latex)가
(nylon mesh)가 (latex)
, 가
(compliance) (elasticity) 가
3
가
가 가 가
(dumbbell shape)
barrel shape
PMV
(balloon rupture), (inflation deformity),
(inflation failure)
1991 Bassand ²⁾
161
PMV 18 (11.2%)
Inoue 1993
Chow ⁸⁾ 150 PMV 2
(1.3%)
PMV Inoue
가 ⁹⁾¹⁰⁾

0.4~4.5%

4) Inoue 가

2) , PMV Inoue

Inoue PMV

Lau 11)

, Hung 12)

Ho 10)

Inoue 245 PMV 4 Inoue PMV가 가

(1.6%) Wi-

Ikins 13) 가 6 8 Inoue

가

14) PMV Inoue

(deflation failure) 1

15) Inoue 1

중심 단어 : ; Inoue

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1989 7 2002 7 492 Inoue

PMV

1 (0.2%) 1

(0.2%)

가

Wilkins 13) 가 5 (

3 , 0 , 2 ,

0) 가

가

3

가

가

가

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