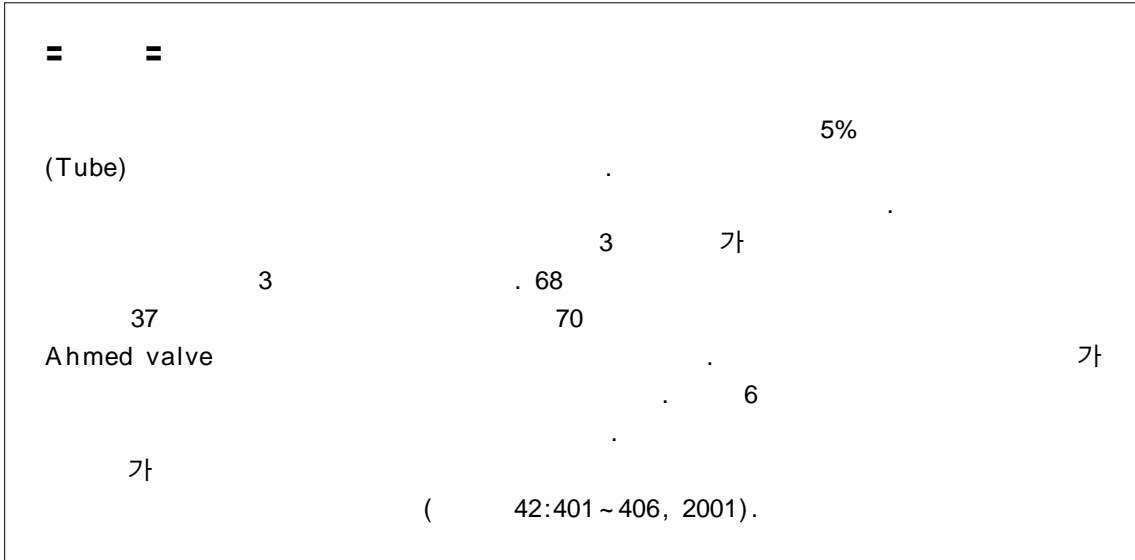


Ahmed Valve
가

(tube)

3

1 . 2 . 1



Abstract

Scleral Allograft with Autologous Buccal Mucosal Transplantation for Tube Erosion Occurred after Ahmed Glaucoma Valve Implant Surgery : Three Cases

Yong Sub Han, M.D.¹, Yong Su Cho, M.D.², Jae Hong Ahn, M.D.¹

After Drainage implant surgery, erosion of conjunctiva or cornea over tube can occur about 5% in late postoperative period. Scleral allograft for

< : 2000 6 28 , : 2000 11 20 >

1

Address reprint requests to Jae Hong Ahn, M.D.
Department of Ophthalmology, Ajou University School of Medicine
#San 5 Wonchon-dong, Paldal-ku, Suwon, 442-749, Korea
Tel : 82-31-219-5260, Fax : 82-31-219-5259, E-mail : ajoueye@madang.ajou.ac.kr

2

Department of Ophthalmology, College of Medicine, Pochon Cha University

* 2000 84

exposed tube should be used to prevent secondary infection. We report three glaucoma patients treated graft with autologous buccal mucosal transplantation for recurrent tube exposure. First case was a 68-year-old male patient with neovascular glaucoma due to central retinal vein occlusion. Second case was a 37-year-old female patient with pseudophakic glaucoma. Third case was a 70-year-old male patient with diabetic neovascular glaucoma. Ahmed glaucoma valve implant surgeries were done for three patients. For tube exposure, we used autologous buccal mucosal transplantation. There was no recurrent erosion and intraocular pressure was maintained well more than 6 months of follow-up. In cases for tube exposure, we introduce that autologous buccal mucosal transplantation can be used to treat tube exposure(J Korean Ophthalmol Soc 42:401~406, 2001).

Key Words : Ahmed valve implant surgery, Tube erosion, Scleral allograft, Autologous buccal mucosal transplantation

가

10 mmHg,

42 mmHg

(Table 5%)

1)¹⁾.

2)

가

Ahmed valve

2

2

가

가

12

가

12

Ahmed valve

가

3

2

37

1

68

1

2

0.15,
35 mmHg,

0.2

2

10 Ahmed valve

2

20

가

1

가

(Tube)
(Reservoir)

(Drainage implant)

(Shunt)

(Protected sclerotomy)

4

가

가

³⁾

가

14

standard

가

Krupin-Denver valve가

3

70

가

가

3

가

가

가

0.6,

(Cavity)

50 mmHg

Molteno 가
Ahmed valve

10

Ahmed

valve

2

2

가

가

5

가

가

가

4

가

가

6

(Fig. 1).

(Table

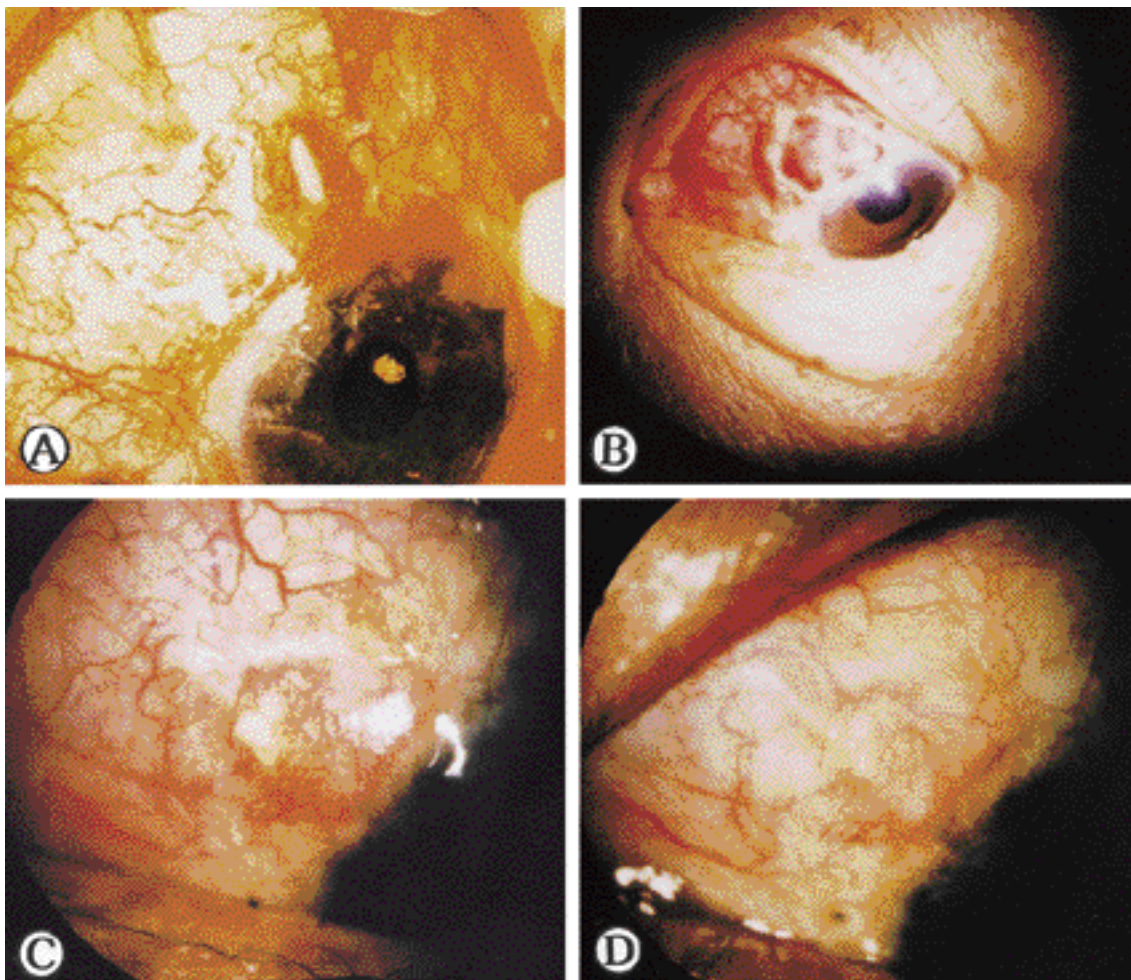


Figure 1. A. Photograph which was taken 2 months after Ahmed valve implantation shows erosion of the tube through the scleral allograft and conjunctiva. B. Photograph which was taken 5 days after scleral allograft with autologous buccal mucosal transplantation shows severe hyperemia and protrusion of the graft. C. Postoperative 2 months. The graft is flat, moderately vascular, and similar to adjacent conjunctiva. D. Postoperative 6 months. The graft is well positioned without complication and intraocular pressure is maintained well.

1)¹⁾. 가
 , - ,
 .
 10-0 , , , ,
 , , , ,
 22 23G 가 Molteno

Table 1. Complications of Drainage Implant Surgery.

Classification	Complications
Operative	Limbal leakage around tube
	Tube damage to cornea, iris, lens
Early postoperative	Flat anterior chamber
	Hypotony
	Choroidal detachment
	Inflammation
	Blockage of tube with fibrin, blood, vitreous, iris
Late postoperative	Limitations of ocular motility
	Thick encapsulation over episcleral explant
	Tube blockage
	Tube migration
	Erosion of tube or episcleral explant

19

가

⁵⁾

1998

Raviv

44

10

5

가

⁶⁾

1999

Lama, Fechtner

⁷⁾ 1999 Aslanides

17

가

15

가

⁸⁾

2

3

²⁾

가

가

3

6

, 12

, 14

1993 Brandt

가

1

가

⁴⁾ 1996

가

Tanji

22

가

REFERENCES

- 1) Theodore Krupin, Allan E. Kolker : Atlas of Complications in Ophthalmic Surgery, 1st ed, London, Mosby-Year Book Europe Ltd, 1993, pp. 7.26-7.31.
- 2) Neil T Choplin, Diane C Lundy : Atlas of Glaucoma, 1st ed, London, Martin Dunitz Ltd, 1998, pp. 259-276.
- 3) : , (), , , 1998, pp. 276-278.
- 4) Brandt JD : Patch grafts of dehydrated cadaveric dura mater for tube-shunt glaucoma surgery. Arch Ophthalmol 111:1436-9, 1993.
- 5) Tanji TM, Lundy DC, Minckler DS, Heuer DK, Varma R : Fascia lata patch graft in glaucoma tube surgery. Ophthalmology 103:1309-12, 1996.
- 6) Raviv T, Greenfield DS, Liebmann JM, Sidoti PA, Ishikawa H, Ritch R : Pericardial patch grafts in glaucoma implant surgery. J Glaucoma 7:27-32, 1998.
- 7) Lama PJ, Fechtner RD : Tube erosion following insertion of a glaucoma drainage device with a pericardial patch graft. Arch Ophthalmol 117:1243-4, 1999.
- 8) Aslanides IM, Spaeth GL, Schmidt CM, Lanzl IM, Gandham SB : Autologous patch graft in tube shunt surgery. J Glaucoma 8:306-9, 1999.
- 9) M. Bruce Shields : Textbook of Glaucoma, 4th ed, Baltimore, Williams & Wilkins Co, 1998, pp. 538-546.
- 10) Topouzis F, Coleman AL, Choplin N, Bethlem MM, Hill R, Yu F, Panek : Follow-up of the original cohort with the Ahmed glaucoma valve implant. Am J Ophthalmol 128:198-204, 1999.
- 11) Ayyala RS, Zurakowski D, Smith JA, Monshizadeh R, Netland PA, Richards DW, Layden WE : A clinical study of the Ahmed glaucoma valve implant in advanced glaucoma. Ophthalmology 10:1968-76, 1998.
- 12) Krupin T, Podos AM, Becker B, Newkirk JB : Valve implants in filtering surgery. Am J Ophthalmol 81:232-5, 1976.
- 13) Coleman AL, Smyth RJ, Wilson MR, Tam M : Initial clinical experience with the Ahmed glaucoma valve implant in pediatric patients. Arch Ophthalmol 115:186-91, 1996.
- 14) Coleman AL, Hill R, Wilson MR, Choplin N, Kotas-Neumann R, Tam M, Bacharach J, Panek WC : Initial clinical experience with the Ahmed glaucoma valve implant. Am J Ophthalmol 120:23-31, 1995.