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Comparison of C-anoplasty and House Shaped Advancement Flap in Anal Stenosis

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Purpose: The surgical treatment of anal stenosis i internal sphincterotomy, rotaton flap and advanceme according to the stenosis degree, recently, Christen formed house shaped advancement flap and reported results. We compared and analyzed the surgical met and results in patients with moderate and severe stenosis who underwent house shaped advancement fl and C-anoplasty.

Methods: We have performed this study with 6 cases u the house shaped advancement flap and 6 cases using C-anoplasty. The out come was assessed by clinical c teristics, surgical method, operation time, duration talization, healing time, postoperative complicatio **Results:** The average operation time was 38 min in t house shaped advancement flap cases and 63 min C-anoplasty cases. The average time of hospitalizat 6 days and 9 days, respectively, and the average t healing was 28 days and 46 days, respectively. In house advancement flap cases, surgery could be done directions at the same time in 4 cases and 3 direct 2 cases; as for those C-anoplasty cases, surgery c done in 1 direction in 4 cases and 2 directions in Two complications were observed in C-anoplasty, one infection and one flap necrosis, and in house shap vancement flap, no complication was observed.

Conclusions: House shaped advancement flap have se advantages compared to the C-anoplasty, and since h shaped advancement flap could be performed in 2 t directions or even 4 directions at the same time, th could sufficiently expanded in severe anal stenosis. The house shaped advancement flap might be one of t good method in treating anal stenosis. JKSCP 200 76-83

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Key Words: Anal stenosis, House shaped advancement flap, C-anoplasty

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5: \mathbf{C} (house) 가 16 5 16 가 5 1992 1999 12 가 9 (82%), 1 가 11 C 6) 가 C 1 C 6 (house) (house) 6 (Table 1). **7**) \mathbf{C} 10 (house) 6 (Table 2). 1) Table 1. Operation time C 가 7, (house) 11 Operation time 가 4 40 60 가 7 (64%) C-anoplasty Within 30 mins 2) 30 60 mins 3 60 90 mins 2 11 9 (82%) Over 90 mins 1 가 6 (55%), 5 6 Total (46%), (46%) 62 mins Mean 3) 11 10 (91%) 1 (9%) Table 2. Duration of hospitalization 4) Duration of hospitalization 11 C-anoplasty 20 가 6 (55%) 1 5 1 (9%), 6 10 1 5 days 5 10 days 4 가 2 (18%), 20 11 15 10 15 days 1 2 (18%) 50 Over 15 days 1 가 6 Total 5) Mean duration 10 days

77

(18%)

62 38

2

No of cases

House shaped

advancement flap

5

1

6

38 mins

House shaped

advancement flap

2

4

6

6 days

No of cases

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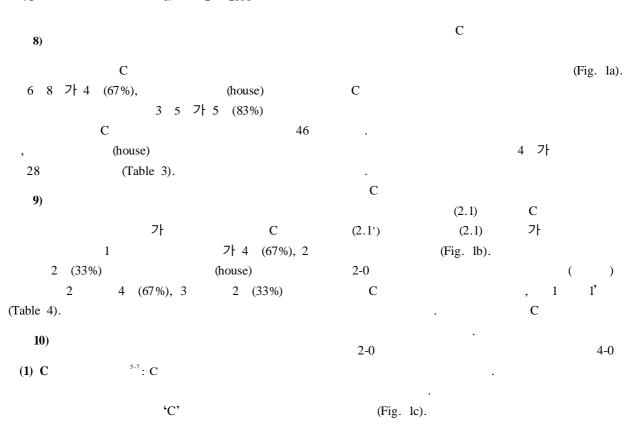


Table 3. Duration of wound healing

 Duration of wound healing
 No of cases (%)

 C-anoplasty
 House shaped advancement flap

 3 5 wks
 2 (33%)
 5 (83%)

 6 8 wks
 4 (67%)
 1 (17%)

6 (100%)

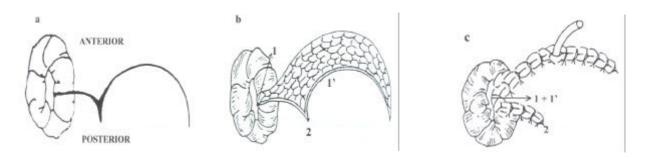
46 days

Total

Mean

Table 4. Number of flap direction at the same operation

Number of flap site	No of cases (%)			
	C-anoplasty	House shaped advancement flap		
One	4 (67%)			
Two	2 (33%)	4 (67%)		
Three		2 (33%)		
Total	6 (100%)	6 (100%)		



6 (100%)

28 days

Fig. 1. C-anoplasty⁵ Incision the anal skin from dentate line to anal verge through full-thickness skin (a). The distance from one corner of the C-incision to the proximal end of the anal radial incision at the dentate line (2,1) is measured, and an equal distance to the C-flap (2,1') is marked (b). Cover the anal defect with the C-flap as it is drawn into the dentate line (1,1').

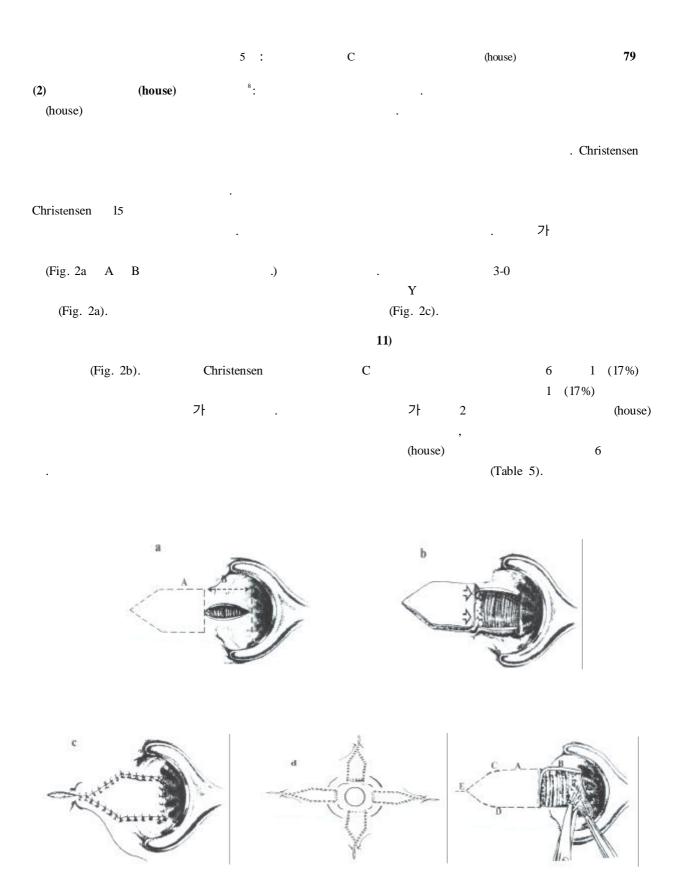


Fig. 2. House shaped advancement flap.⁸ A longitudinal incision is made laterally for the length of the anal canal. Proximal and distal incisions, centered on the ends of the longitudinal incision (a). After undermining the wound edges, it assumes a rectangular shape (b). The completed house shaped flap is advanced, lining the entire length of the anal canal, and sutured in place (c). House shaped advancement flap can be performed at 4 directions in severe stenosis (d) Author's modified house shaped advancement flap (e).

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(Good), ... (Fair), (Poor) , Milsom 9

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 C
 6
 78%
 .4,10-12

 C
 6
 11

 3 , 1 , 1
 10 (91%)

 1 , 1
 1 (9%) .

1 (Table 6).

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Table 5. Complication 7

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Table 6. Result of operation

Result	C-anoplasty			House shaped advancement flap			
Kesuit	Good	Fair	Poor	Good	Fair	Poor	
Moderate	3	1		3	2	_	
Severe	1	_	1	1	_	_	
Total	4	1	1	4	2	_	

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                                                                                                   . Y-V
                                                                      (house)
                                                                             Penn<sup>15</sup>
                                                                   1948
                                    가 9 (82%),
                                                                                  Nickell
2 (18%)
                                                             Y
                                                             V
                                                                                                V
가
             1 2
                                (Little finger)
                 (Index finger)
                    .13
                                                                         Kodner<sup>17</sup>가
                                                               Caplin
                                                                              가
                                                                                                     가
                                                               Sarner<sup>18</sup>
                                                                          1969
                                                                    2
                                                                              3,
                                                                                                   (Fig. 3).
                                                                     1992
                                                                             Christensen
                                                                                           Sarner
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  가
                                               가
                                              1,10
                  C
                                        S
                                                1959
Ferguson 14
                                 가
             가
                                 가
                                 가
                                                                      Fig. 3. Rectangular advancement flap. 18
              Oh
                               S
                       1982
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(house) , Fig. 2a A B A가 B 가 S-C-가 Α 가 B , Y-V (Fig. Christensen 2e). 가 가 가 C 가 가 2 3 C 가 가 가 가 2 3 . Sarner (Fig. 2d). S C 가 가 가 Chri-Christensen stensen 1992 1999 12 11 C (Fig. 2e). 가 1 C 6 6 C (Fig. 2e C,D) 가 releasing incision (Fig. 2e E) dog ear Christensen

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