



in 14/16 (87.6%), HSE in 12/15 (80.0%), FG+HSE in 9/14 (64.3%). There was no significant difference in success rate among the endoscopic treatment modalities. Nine patients had to be operated despite the endoscopic treatments, and four patients died due to the causes other than gastrointestinal bleeding. **Conclusions:** Endoscopic therapy of upper gastrointestinal Dieulafoy's disease is effective and should be employed before the surgical intervention. (**Korean J Gastrointest Endosc 19: 18 25, 1999**)

**Key Words:** Dieulafoy's disease, Gastrointestinal bleeding, Endoscopic treatment

Dieulafoy .7,13-15)  
 Dieulafoy Dieulafoy ,  
 가 .

Dieulafoy  
 15)  
 1990 1 1997 7  
 Dieulafoy  
 51  
 .67)

Dieulafoy  
 0.5% 14% .8)  
 Fibrin glue, HSE (hy-  
 pertonic saline with epinephrine, 1 : 10000), alcohol,  
 hemoclip .  
 , hemo-  
 clip 2 .  
 가 ,  
 가 가 ,  
 7  
 ,  
 Dieulafoy  
 H2 .  
 , , , , , ,  
 , , , , , ,  
 .69-12)  
 가 student t-test 2-test .

1) 51.2 ± 16.6 (Mean ± SD, range: 19-80) 가 42 (82.4%), 가 9 (17.6%) (Table 1). 8 4.7 : 1 2.1 g/dL , 가 10 g/dL (Table 1), 43 (84.3%) 16 (31.4%) 12.4 ± 13.2 , 8.9 ± 9.4 , 23 (45.1%), 16 (31.4%), 가 12

(23.5%) (Table 1). 6 20 (39.3%), 6 12 7 (13.7%), 12 24 7 (13.7%) 66.7% 가 24 . 24 7.5 ± 2.1 g/dL , 가 10 g/dL (Table 1), 43 (84.3%) 16 (31.4%) . 12.4 ± 13.2 , 8.9 ± 9.4 , 23.7 ± 17.3 .

**Table 1.** Clinical Features of Patients with Dieulafoy's Diseases (n=51)

Age (years)	Mean	51.2 ± 16.2
	Range	19-80
Sex (male:female)		4.7 : 1
Manifestation of GI bleeding (%)		
	Melena	23 cases (45.1)
	Hematemesis	16 cases (31.4)
	Melena & hematemesis	12 cases (23.5)
Hemoglobin at admission (Mean ± SD g/dL)		7.5 ± 2.1
Hemoglobin below 10 g/dL at admission (%)		43 cases (84.3)

2) 74.5%, 25.5% Dieulafoy 65.8%, 5.3%, 28.9% (Fig. 1), 가 34.2%, 21.1%, 44.7% 57.0%, 21.5% , 가 21.5% (Fig. 2). 1 Dieulafoy 72.5% , 2 16.0%, 3 가 11.5% 9 (17.6%),

**Fig. 1.** Location of Dieulafoy's diseases (n=51).

**Fig. 2.** Manifestation of Dieulafoy's diseases at the time of endoscopy (n=51).

6 : Dieulafoy : 21

9 (17.6%), 4 (7.8%), 3)

가 1 (2.0%)

fibrin glue 가 16  
 (31.4%), HSE 15 (29.4%), HSE fibrin glue  
 14 (27.5%), 6 (11.7%)  
 fibrin glue가  
 87.5%, HSE 80.0%, HSE fibrin glue  
 64.3%

alcohol, alcohol fi-  
 brin glue hemoclip  
 50% (Fig. 3). Dieulafoy

1  
 64.7% , 2  
 9.8% 74.5%  
 . 9 (17.6%)

**Fig. 3.** Hemostatic rate of endoscopic treatment of Dieulafoy's diseases.

**Fig. 4.** Outcome of Dieulafoy's diseases.

, 4 (7.9%)

(Fig. 4).

4) Dieulafoy .2121) Dieulafoy .21-23) 가 .621) Dieulafoy Goldman<sup>24)</sup> (pressure necrosis) Osler<sup>16)</sup> (Redu-Weber-<sup>18)</sup> Dieulafoy 가 .8) 51.2 ± 16.6 가 가 가 4.7 : 1 가 .15,19,21) 가 (25%), (39%), 8 9 g/dL, (11%) 가 .8) Dieulafoy 24 7.5 ± 2.1 mg/dL , 10 g/dL 84.3% 12.4 ± 13.2 가 가 가 .8) 6 cm 17.6% 가 .8,15,21)

가  
 .2527) Die-  
 ulafoy  
 Dieulafoy 1990 1 1997 7  
 Dieulafoy 51  
 .69,10) Dieulafoy .3679,11,12)  
 Dieulafoy 1) 51.2 ± 16.6(19 80)  
 4.7 : 1  
 Dieulafoy 가 2) 7.5 ± 2.1 g/dL  
 .8) , 가 10 g/dL 43  
 (84.3%) , 16  
 (31.4%)  
 3) 1 Dieulafoy  
 72.5% , 3  
 가 11.5%  
 .8) 1 4) 74.5%, 25.5%  
 Dieulafoy 49 82% ,82) Dieulafoy 65.8%,  
 1 72.5% 5.2%, 21.6% , 가  
 34.2%, 21.1%, 44.7%  
 Dieulafoy 5) Dieulafoy 1  
 82 100% .812) 64.7% , 2  
 1 Dieulafoy 9.8% ,  
 64.7% , 74.5% 74.5% . 9  
 . Pointner 6) , 4  
 (7.9%)  
 Dieulafoy  
 .2831) Histoacyl<sup>®</sup> (n-butyl-2-cyanoacrylate)32)  
 Nd:YAG 33) Dieulafoy  
 fibrin glue, HSE, fibrin glue HSE  
 가

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**Fig. 5. A:** The protruding vessel is seen in the cardia. **B:** Endoscopic injection of sclerosant is done into the lesion.