

5,236

Delayed Bleeding in a Colonoscopic Polypectomy

—An experience with 5,236 polypectomies—

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Purpose: Delayed hemorrhage rarely happens after a colonoscopic polypectomy, ranging from 0.2 to 1.8% in frequency. Although its occurrence is unpredictable and it may be serious in some cases, scanty data on its causes, characteristics, and effective management exist in Korea. This study was conducted to provide such data, especially data on the characteristics of delayed hemorrhage and its effective management. **Methods:** From 1997 to 1999, one endoscopist at Song-Do Colorectal Hospital performed 5236 polypectomies on 2511 patients. Delayed hemorrhage occurred after 9 of those polypectomies, for a bleeding incidence rate of 0.17% (9/5236). The authors reviewed those 9 incidence of delayed hemorrhage, which involved 9 patients and 9 lesions, with emphasis on the characteristics of the bleeding and the treatment. **Results:** The mean age of the 9 patients was 50 years, and the male-to-female ratio was 8 : 1. The sigmoid colon was involved in 4 of those patients (44.4%), and the right-sided colon was involved in another 4 of those patients. Lesions smaller than 11 mm were either sessile or flat-elevated and accounted for 6 of the 9 lesions (66.7%). The remaining lesions, which were larger than 10 mm, were either pedunculated or semipedunculated. Three (3) of the 9 patients (33.3%) experienced bleeding on day 1, the most common bleeding day. Another 5 patients (55.6%) experienced bleeding during the next 4 days (days 2 to 5). The last patient experienced bleeding on day 9, the latest bleeding day. A snare polypectomy had been performed on 7 of the 9 patients (77.8%), and a hot biopsy had been performed on the other 2 (22.2%). All delayed bleeding was treated by using hemoclips; additional epinephrine injection was used in 55.6% of the cases and an additional detachable snare in 22.2%. Rebleeding was noticed the day following the initial treatment of bleeding in one case and was managed by using hemoclips. **Conclusions:** The first 5 days after a colonoscopic polypectomy are crucial, and caution is required during the next 5 days. Thorough knowledge about preventing and managing bleeding is essential. (JKSCP 2000;16:462—468)

Key Words: Delayed hemorrhage, Polypectomy, Hemoclip, Detachable snare
가

2,511 5,236

(snare entrapment), (ensnared) 0.17% (9/5,236)

bowel) 가 50 32 61 8 : 1 가

(Table 1).

가 2)

2 1-8

가 5,6

0.2% 1.8% 5-9 1)

가 4 (44.4%) 가

3 (33.3%)

1 (Table 2).

2)

10 mm 6 (66.7%), 5 mm

3 (33.3%) (Table 3).

3)

1)

1997 1999 3 1

1 가 3 (33.3%) 가

8 (88.9%) 5

Table 1. Presentation of delayed bleeding cases

No.	Age	Sex	Site	Size	Shape	Histology	Treatment	Bleeding day	Treatment of bleeding	Rebleeding	Trans-fusion
1	61	M	AC	2.7	Ip	TA	Py + clip + DS	1	Clip + DS	—	—
2	60	M	SC	0.4	Is	TA	Py	4	Clip	+*	—
3	59	M	SC	0.7	Is	TA	Py	2	Clip + epi	—	—
4	55	M	SC	0.3	Is	TA	HB	3	Clip + epi	—	—
5	54	M	SC	1.8	Isp	TVA	Py + clip	1	Clip	—	—
6	47	M	C	0.6	Is	TA	Py	5	Clip + epi	—	—
7	43	M	AC	0.6	IIa	HP	Py	4	Clip + epi	—	—
8	40	F	AC	2.0	Ip	VA with mca	Py + clip	1	Clip + DS	—	3 units
9	32	M	R	0.3	IIa	HP	HB	9	Clip + epi	—	—

* = This rebleeding case was treated by using clips again.

C = cecum; AC = ascending colon; SC = sigmoid colon; R = rectum; Ip = pedunculated; Isp = semipedunculated; Is = sessile; IIa = flat-elevated; TA = tubular adenoma; TVA = tubulovillous adenoma; VA = villous adenoma; HP = hyperplastic polyp; mca = mucosal cancer; Py = polypectomy; HB = hot biopsy; Clip = hemoclip; DS = detachable snare; Epi = epinephrine injection.

Table 2. Site distribution of resected lesions

Site	Number
Cecum	1
Ascending colon	3
Sigmoid colon	4
Rectum	1
Total	9

Table 3. Relationship between size and configuration of lesions removed by polypectomies

Size (cm)	Shape				Total
	Ip	Isp	Is	Iia	
0.5	0	0	2	1	3
0.6	0	0	2	1	3
1.1	1	1	0	0	2
2.1	1	0	0	0	1
Total	2	1	4	2	9

Ip = pedunculated; Isp = semipedunculated; Is = sessile; Iia = flat-elevated.

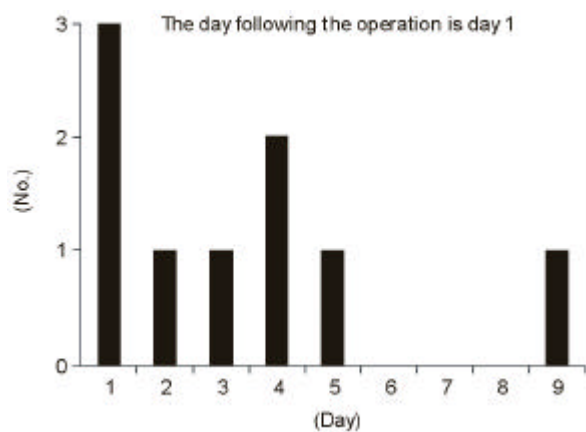


Fig. 1. Number of patients experiencing delayed hemorrhage on each day following a polypectomy.

가 1 9 (Fig. 1).
 4)
 가 7 (77.8%), 2
 (22.2%) . 가 2

Table 4. Distribution of treatment modality of polyps

Treatment	Number
Polypectomy	4
Polypectomy+hemoclip	2
Polypectomy+hemoclip+detachable snare	1
Hot biopsy	2
Total	9

Table 5. Treatment of delayed bleeding after polypectomies

Treatment	Number
Hemoclip	2
Hemoclip+epinephrine injection	5
Hemoclip+detachable snare	2
Total	9

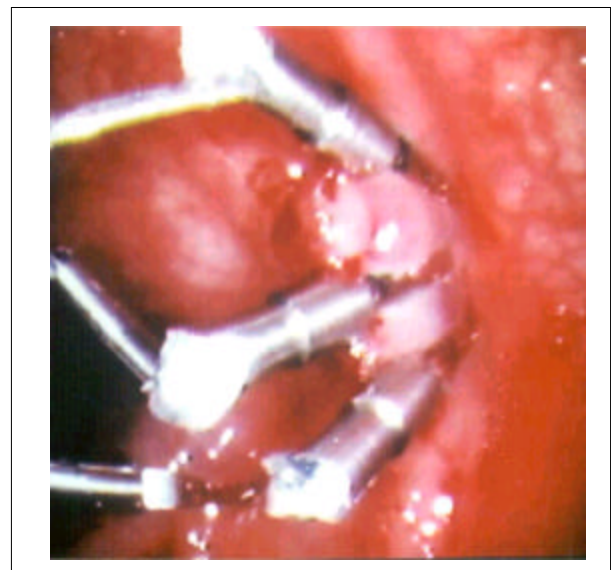


Fig. 2. Delayed bleeding occurred on day 4 in patient No. 2 of Table 1. Hemostasis was done using hemoclips. Rebleeding was noticed the day after treatment of the first bleeding. Hemostasis was done using more hemoclips.

, 1 가 (detachable snare)
 (Table 4).

5)

^{6,11,12,14}
0.2% 1.8%

5 (55.6%)
2 (22.2%)
(Table 5).

⁵⁻⁹

가

가
가

6)

0.17%

1

4

가

가

(Table 1, Fig. 2).

¹⁵⁻¹⁸

4 (44.4%)
가

가 가 . Macrae ⁵ 20

가

mL

가 ¹¹

(minor hemorrhage), 1 5 unit

가 ¹²

10 mm

(major hemorrhage)

6 (66.7%)

3 unit

가

가 1 (Table 1).

가 ¹¹

1 14

2

¹⁰

(secondary hemorrhage)

2

가 ¹²

가

0.33%

6 (66.7%)

. Binmoeller ¹⁰

3

10 mm

(procedural bleeding), 24

가

10 mm

(immediate bleeding),

가

27 mm

24

(delayed bleed-

24

ing)

3

¹⁹

2 4

^{7,8,10,11,18}

80 90%가 5 6

^{7,18} 92.9%가

⁸

가

12

^{7,9}

2

8 (88.9%)가 5

9

2

가

가

^{11,18}

¹⁵⁻¹⁷

가

(eschar coagulum)

가

4 5 mm

¹⁵

가

¹³

16%

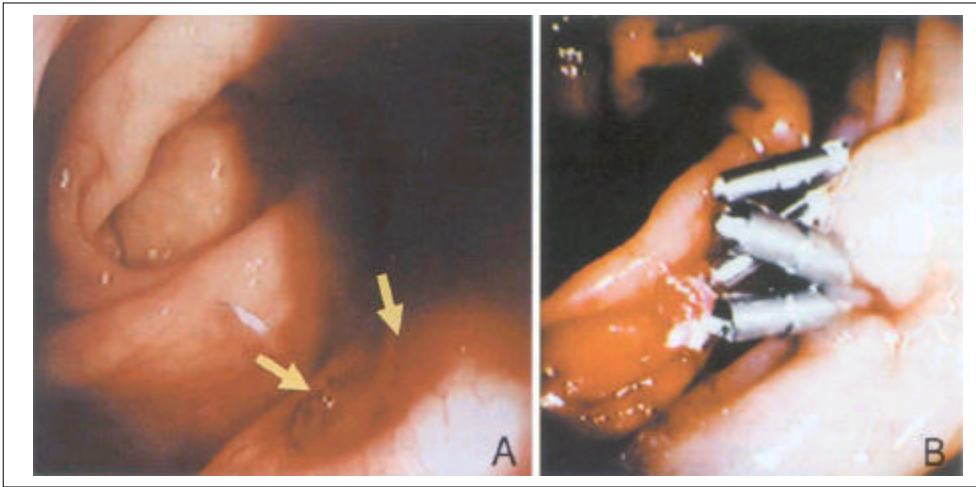


Fig. 3. A. Bleeding was recognized on day 4 in patient No. 7 of Table 1. Note an artificial ulcer with bleeding (arrows). B. Bleeding was controlled by using hemoclips and epinephrine injection.

16,17
 17
 가
 22.2%
 가
 , Technetium-tagged red blood count
 scintigraphy 1,9
 Pitressin , Gel-
 foam emboli 1,9
 20
 ,
 21
 polyethylene-glycol

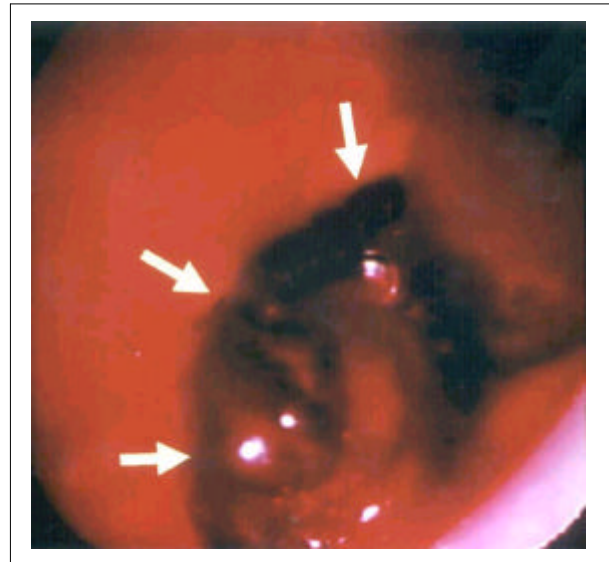


Fig. 4. Bleeding occurred in patient No. 5 of Table 1. Prophylactic hemoclips covered with clustered blood clots were noticed (arrows). Additional hemoclips were applied and epinephrine was injected.

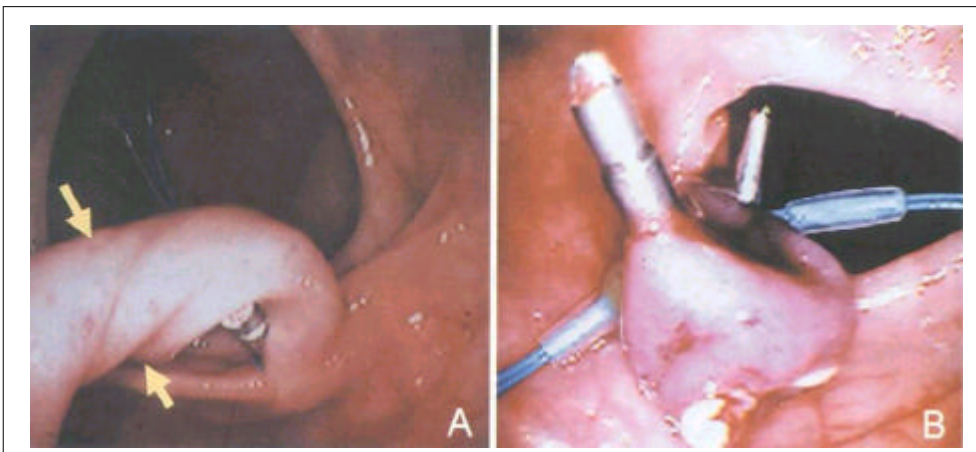


Fig. 5. A. A large pedunculated polyp with a thick stalk (arrows). B. A snare polypectomy was done after applying prophylactic detachable snares at the base of the stalk.

가

(1 : 10,000

1 : 20,000)

22

가

가

10,13,22

argon plasma

가

22
가

8,22 Argon plasma

argon

gas

7,8,22,23

가

가

가

22

13.5%

22

(Fig. 3, 4).

가 가

11.1%

가

가

7,8,22,24

가

가

1

가

(Fig. 5).

가

2

가

가

7,8,11,18

가

가

가

가 (loop)

14

7 10

27,28

가

가

가

가

가

가 1
가 가

가 가

24-26

5

가

가

10

가

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が
が

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