

(anaphylactic shock) 1 58 (7) .

8) 89%, 44% 83%

9)10) 14 , 4 10

(comma area) (my-
lohyoid muscle) 가 (Denhart mouth
gag) retractor) (buccal
(stay suture)

2/3 , 가 가 가 (microscope)
가 가 가 (probe)
10 mm
(Co-
lorado bovie tip electrocautery)

15

1994 1 2004 1 가 (mosquito)
25
9
16
(Vicryl®) 5

(si-
alogram) , 25 12 (guide line)
, 11
2 (bimanual
palpation) 17 가
8 (Fig. 1).

1 39.2
(15~63) , 가 14 , 가 11
25 12 , 13
가
가

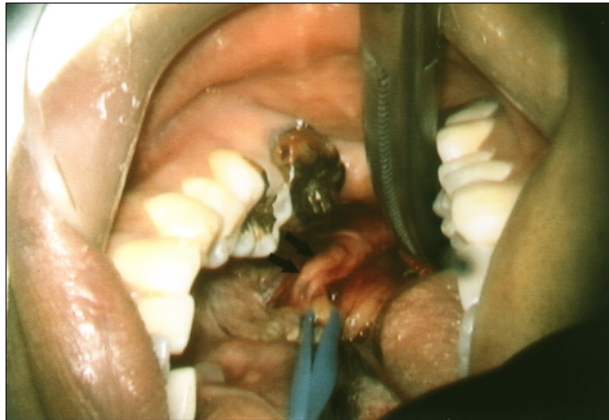


Fig. 1. Intraoral approach to the right calculus in the hilum of submandibular gland (left side of the picture is the patient's right side mandible). Right Wharton's duct is identified and retracted with the vessel loop. The lingual nerve (arrows) is found at the lateral side of the duct.

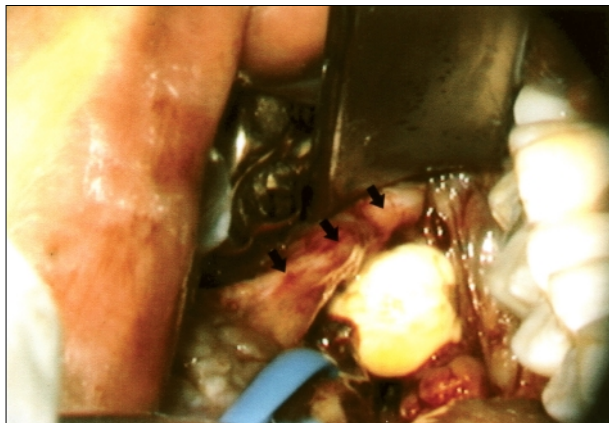


Fig. 2. Identification of the stone in the right hilum of the submandibular gland by tracing the duct up to the hilum (left side of the picture is the patient's right side mandible). Lingual nerve (arrows) is shown at the lateral side of the stone.

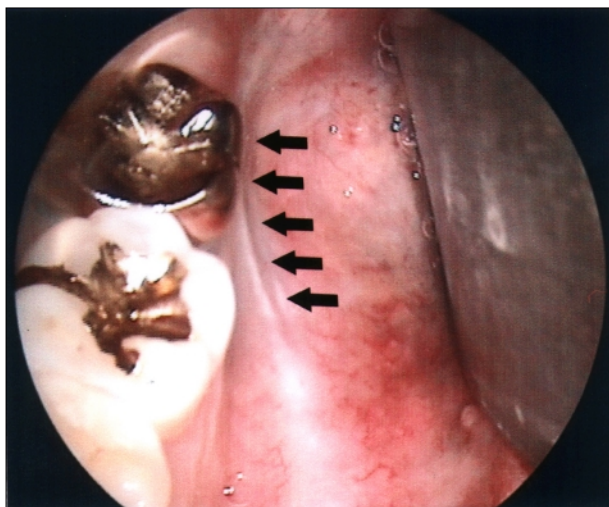


Fig. 3. Postoperative 6 month view : Marsupialized duct (arrows) and salivation after massaging the submandibular gland were visible.

가
(Fig. 2).

가
(Fig. 3).

2002
2002
(Fig. 4).
3~9
mm(6.1 mm) ,
5~15 mm(7.8 mm) .
(22.2%)
(92.9%)
4 (Table 1).
(residual stone)

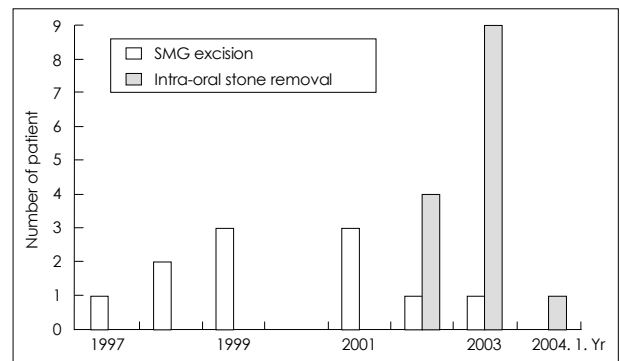


Fig. 4. Trend of surgical approaches to the calculi located in the hilum of submandibular gland in Samsung Medical Center. SMG : submandibular gland.

Table 1. The characteristic findings of calculi in two groups

	SMG resection (n=9)	IRM (n=14/16)*
Size of stone (mean)	3 - 9 (6.1) †	5 - 15 (7.8)
Case of palpable stone	2 (22.2) ‡	13 (92.9)
Multiplicity	4 (44.4) ‡	4 (28.6)

*2 cases are excluded, † millimeter, ‡ percentage, SMG : submandibular gland, IRM : Intraoral stone removal with marsupialization of the duct

Table 2. Treatment outcomes

	SMG resection	IRM
Residual or recurrent stone	0	0
Complication	2 (22.2)*	4 (25.0)
Treatment failure	0	2 (12.5) †

*Percentage, † failure to remove the whole, impacted large stone and failure to find out the impalpable stone. SMG : submandibular gland, IRM : Intraoral stone removal with marsupialization of the duct

Table 3. Complications and postoperative recovery time of two groups

	Complication	Time to recovery after operation (wks)
SMG resection	Lower lip weakness	Permanent
	Lower lip weakness	2
IRM	Submandible area swelling	4
	Submandible area swelling	4
	Decreased sensation of tongue	1
	Ranula formation	12

SMG : submandibular gland, IRM : Intraoral stone removal with marsupialization of the duct

가 2 (impacted large stone)

1

(Table 2).

6 (Table 3).
2

2 1
1

1 가 2 , 가

1 , 3
(ranula) 1

1

22.2%, (Table 2).
25.0%

12.5% 가 7%

¹³⁾ 가 가

¹⁴⁾

가

가 가 57% ¹⁵⁾

¹⁶⁾

, 30~50%

2/3

가

91% ¹⁷⁾

¹⁸⁾

가 가

가 가

가 가

(maceration)가 가 가

