

Post-procedural complication rates and utilization of health care between gomco and plastibell office circumcision techniques



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Background

GOMCO



PLASTIBELL



- Similar features but plastibell is retained upon office discharge
- We evaluated the rate of early complications and impact on health care utilization

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HYPOTHESIS: plastibell and gomco have similar risks of complications, but plastibell results in higher utilization of health care resources

Methods

- Retrospective chart review of office circumcisions
 - January 2015 - August 2018
- Comparison of
 - Demographics
 - Circumcision technique
 - Provider information
 - Early Outcomes (≤ 14 days of circumcision)
 - ED/UC visits
 - Complications
 - Post-procedure telephone calls

Results

**Overall Circumcision
(n=1030)**

	Plastibell (n=665)	Gomco (n=365)	P-value
Median age weeks (mean; range)	11.9 (14.4; 0.9 - 56.9)	10 (10.7; 0.6 - 29.3)	<0.001
Median weight kg (mean; range)	5.9 (5.9; 3.1 - 13.1)	5.5 (5.5; 3.0 - 8.8)	<0.001
Median days to last follow-up (mean; range)	15 (19; 1 - 181)	28 (35; 111; 3 - 875)	<0.001
No follow-up (%)	191 (29)	121 (33)	0.1390

- Approximately 65% of the procedures were performed by plastibell, with 35% by gomco

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	Weighted Incidence (95% confidence interval)		
	Plastibell	Gomco	p-value
Complications (%)	3.1 (1.8-4.3)	2.5 (0.9-4.1)	0.614
Postoperative bleeding	1.7 (0.7-2.7)	1.0 (0-2.1)	
Infection	0.6 (0.1-1.1)	0 (0)	
Swelling	0.8 (0.2-1.4)	0 (0)	
Dehiscence	0 (0)	1.5 (0.2-2.7)	
Interventions (%)	4.4 (2.7-6.2)	4.1 (2.2-6.1)	0.831
Office	3.0 (1.5-4.5)	3.1 (1.4-4.7)	
ED/UC	1.2 (0.3-2.1)	1.1 (0-2.1)	
Operating Room	0.2 (0-0.5)	0 (0)	
ED or UC visit	3.6 (2.2-5.1)	1.7 (0.3-3.2)	0.102

- Unplanned urology OV → Plastibell 32 (4.8%) vs. Gomco 35 (9.6%)
- Office phone calls → Plastibell 139 (20.9%) vs. Gomco 65 (17.8%)

Conclusions

- There was no significant difference in early postoperative complications between gomco and plastibell techniques
- Plastibell appears to result in more phone calls while gomco results in more unplanned office visits
- This knowledge could lend to better education at time of office circumcision regarding expectations