

# Complications of 1028 sutureless inferior third molars surgeries. Dental and medical services of the Caribbean.

Hernán Arango Fernandez. DDS. Department of Oral and Maxillofacial Surgery. Dental and Medical Services of the Caribbean (SOMECA). Professor of Pontifical Xavierian University and Professor of El Bosque University. Colombia.



José Manuel Valdés Reyes. DDS. Department of Oral and Maxillofacial Surgery. Pontifical Xavierian University. Colombia



Álvaro Andrés Rodríguez Sáenz. DDS. Department of Oral and Maxillofacial Surgery. El Bosque University. Colombia.

Sebastian Zapata Ocampo. Department of Oral and Maxillofacial Surgery. El Bosque University. Colombia.



**Objective:** The purpose of the present study was to identify the postoperative complications of patients who underwent surgery of lower third molars with a sutureless of the flap at the end of the procedure.

**Study Design:** The study implemented a retrospective descriptive observational design and included all subjects who underwent surgery of impacted lower third molars from January 2015 to March 2020. In SOMECA, the extraction of included third molars without suturing at the end of the procedure is the protocol of care in all patients. A total of 2,218 patients met the inclusion criteria. A universe of 900 patients was selected. In the 900 patients, 1028 third molars were extracted. It worked with the whole universe. The post-operative complications in the first 30 days of surgery were evaluated.

**Results:** The study sample included 1028 sutureless inferior third molars surgeries. The overall complication rate for extractions conducted under local anesthesia was 8% for the inferior third molars (82 of 1028 third molars extracted), 2.43% of complications being due to infection. Bleeding occurred in 0.58% and they were all females. The most represented age group was 10 to 19 years old and the females were the most affected. There were no complications in the surgical procedures performed in age group 50 to 79.

Table 1. Distribution of the study population by age and complication rate

Age (Years)	Surgeries with complications		Surgeries without complications		Total	
	n	%	n	%	n	%
	10-19	13	1.3%	154	15.0%	167
20-29	55	5.4%	516	50.2%	571	55.5%
30-39	13	1.3%	239	23.2%	252	24.5%
40-49	1	0.1%	29	2.8%	30	2.9%
50-59	0	0%	7	0.7%	7	0.7%
70-79	0	0%	1	0.1%	1	0.1%
Total	82	8.0%	946	92.0%	1028	100.0%

Table 2. Distribution of the study population by age and complications

Age (Years)	Dry Socket		Cellulitis		Total	
	n	%	n	%	n	%
	10-19	0	0%	0	0%	0
20-29	13	1.26%	8	0.78%	21	2.04%
30-39	1	0.10%	2	0.19%	3	0.29%
40-49	1	0.10%	0	0%	1	0.10%
50-59	0	0%	0	0%	0	0%
70-79	0	0%	0	0%	0	0%
Total	15	1.46%	10	0.97%	25	2.43%

Table 3. Distribution of the study population by age and bleeding complications

Age (Years)	Hemorrhage		Hematoma		Total	
	No	%	No	%	No	%
	10-19	1	0.10%	5	0.49%	6
20-29	5	0.49%	7	0.68%	12	1.2%
30-39	1	0.10%	2	0.19%	3	0.3%
40-49	0	0%	0	0%	0	0%
50-59	0	0%	0	0%	0	0%
70-79	0	0%	0	0%	0	0%
Total	7	0.68%	14	1.36%	21	2.0%

Table 4. Distribution of the study population by age and neurological complications

Age (Years)	Lingual Nerve Impairment		IAN Impairment		Total	
	n	%	n	%	n	%
	10-19	2	0.2%	0	0%	2
20-29	6	0.6%	11	1.1%	17	1.7%
30-39	6	0.6%	2	0.2%	8	0.8%
40-49	0	0%	0	0%	0	0.0%
50-59	0	0%	0	0%	0	0.0%
70-79	0	0%	0	0%	0	0.0%
Total	14	1.4%	13	1.3%	27	2.6%

IAN: Inferior alveolar nerve

**Conclusions:** The complications that occur in operated inferior third molars with the sutureless technique are low. The sutureless technique for extraction of the lower third molars is unrelated to infection or bleeding after surgery.