

Comparing Success of Strip Crown versus Pre-veneered Stainless-Steel Crowns

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Purpose

To evaluate the success of resin (strip) crowns compared to pre-veneered stainless-steel crowns on primary anterior teeth, in the operating room setting.

Methods

Electronic health records were reviewed for patients treated under general anesthesia (GA) in the operating room (OR), at a tertiary medical center between years 2013-2022. Resin strip crowns using TPH Spectra® and pre-veneered stainless-steel crowns, NuSmiles®, were compared. Treatment success was followed until observed failure or censoring.

Inclusion Criteria:

- At least one surface of a cavitated lesion.
- Vital, painless teeth.

Conclusion

Strip crowns had significantly shorter survival compared to pre-veneered stainless-steel crowns.

Results

Table 1. Demographics of patients (n = 196).

Characteristic	
Gender	
Female	87 (44%)
Male	109 (56%)
Age (years)	
Mean (SD)	4.4 (1.1)
Median (Q1, Q3)	4.4 (3.6, 5.1)
Range	2.0, 6.9

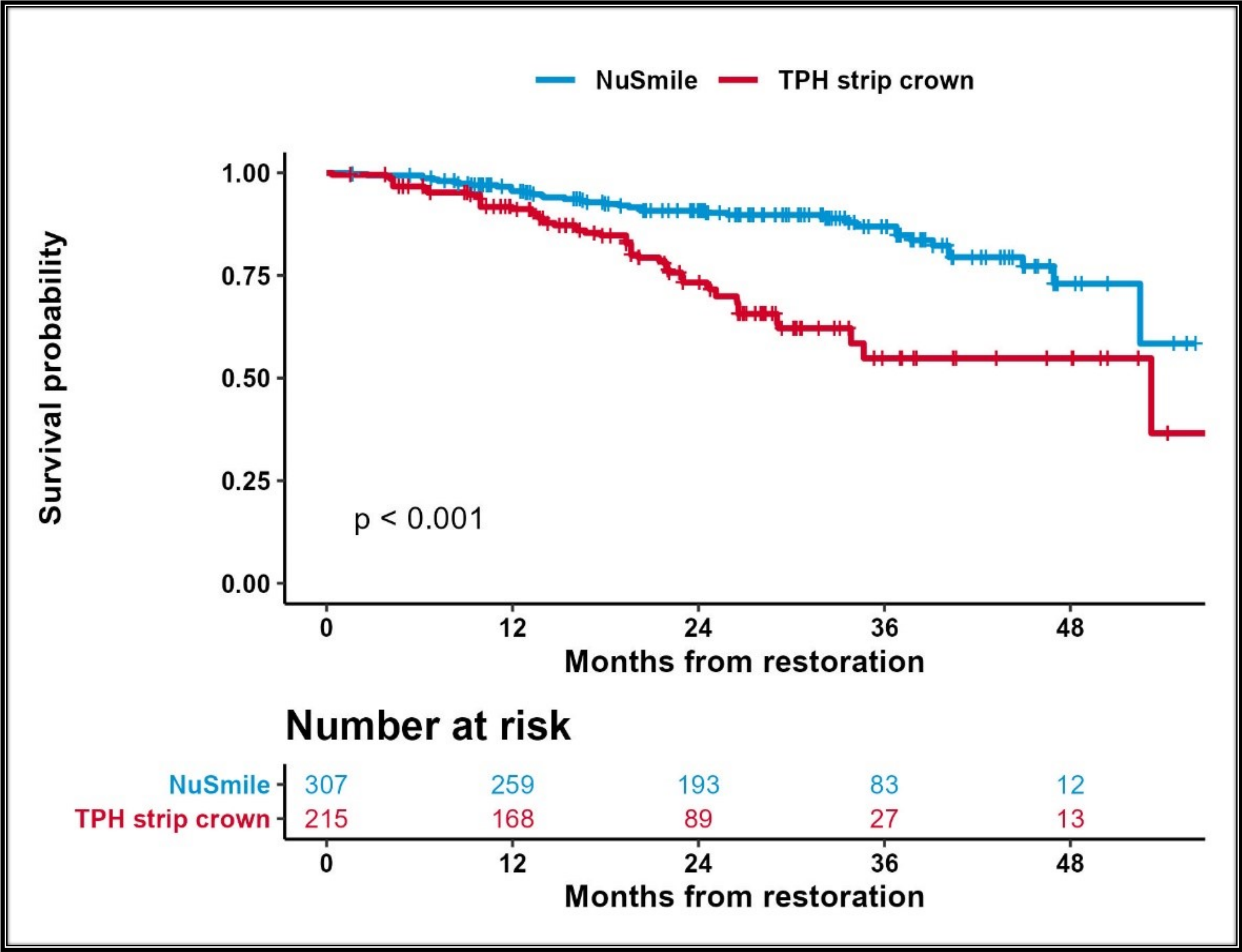


Figure 1. Kaplan-Meier estimates of survival for NuSmile® and TPH Spectra® strip crown restorations performed in the OR setting; “+” denotes censoring event; log-rank test p-value shown in lower left corner; x-axis is truncated at 54 months.

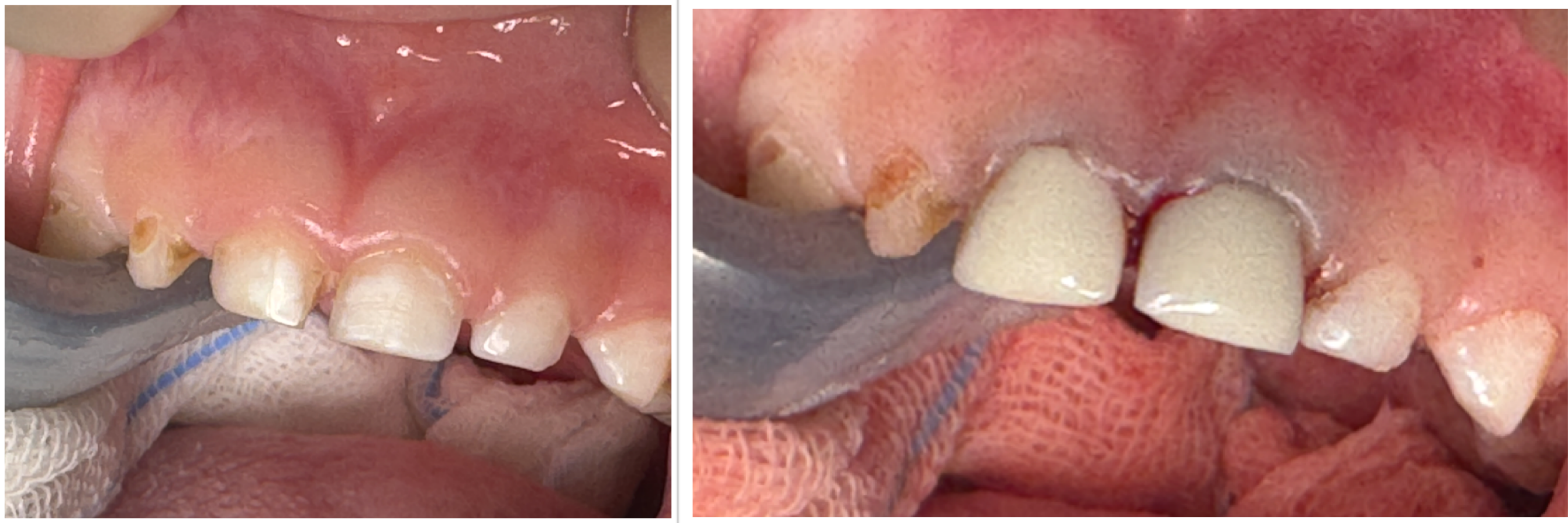


Table 2. Restoration survival overall and by restoration type.

	Overall (n = 522 [100%])	NuSmile (n = 307 [59%])	TPH strip crown (n = 215 [41%])
Restoration failures, n (%)	101 (19%)	39 (13%)	62 (29%)
Restoration survival (months)			
Median (95% CI)	53.2 (52.5, NR)	NR (52.5, NR)	53.2 (33.8, NR)
CI = Confidence Interval; NR = Not Reached			