

Supplementary Materials: Table S1: Univariate logistic regression with selected variables for wound healing complications, Table S2: Multivariate logistic regression for wound healing perioperative complications after parotidectomy, Table S3: Univariate logistic regression with selected variables for perioperative occurrence of seroma, Table S4: Multivariate logistic regression for occurrence of seromas, Table S5: Univariate logistic regression with selected variables for Clavien-Dindo grade > 1 complications, Table S6: Multivariate logistic regression for Clavien-Dindo grade > 1 complications.

Figure S1: Length of hospital stay. Patients with no complication (surgical procedures: $n = 100$), Figure S2: Length of hospital stay. Patients with complications (surgical procedures: $n = 336$), Figure S3: Length of hospital stay with no facial paralysis, Figure S4: Length of hospital stay with facial paralysis, Figure S5: Length of hospital stay with no wound healing complication, Figure S6: Length of stay in patients with wound healing complications, Figure S7: Length of hospital stay with no seroma/sialocele, Figure S8: Length of hospital stay with seroma/sialocele.

Table S1: Univariate logistic regression with selected variables for wound healing complications after parotidectomy (surgical procedures: $n = 436$). Variables with a p -value < 0.2 selected for multivariate logistic analysis are in colored lines. Abbreviations: y: yes, n: no, ASA: American Society of Anesthesiologists, BMI: Body Mass Index, RT: radiotherapy, T: tumor, res.: resection, ND: neck dissection, SMAS: Superficial Musculoaponeurotic System

Variable	Odds Ratio (95% CI)	p -value
Age at surgery: as a continuous variable	1.001 (0.990–1.012)	0.859
Gender: F/M	0.671 (0.447–1.006)	0.054
ASA score: ASA 2 vs 1	1.075 (0.651–1.777)	0.776
ASA score: ASA 3 vs 1	1.182 (0.550–2.542)	0.668
BMI (kg/m ²): as a continuous variable	1.037 (0.998–1.079)	0.065
Active smoking: y/n	1.224 (0.804–1.862)	0.347
Previous head & neck RT: y/n	1.036 (0.307–3.501)	0.954
Previous parotid surgery: y/n	0.504 (0.165–1.535)	0.228
Group 2 (Parotidectomy + ND) vs Group 1 (Parotidectomy alone)	0.562 (0.221–1.430)	0.226
Group 3 (Parotidectomy + other T res.) vs Group 1	0.655 (0.286–1.504)	0.318
Group 4 (Parotidectomy + ND + other T res.) vs Group 1	1.138 (0.524–2.471)	0.744
Type 2 (complete superficial) vs Type 1 (partial superficial)	1.107 (0.655–1.872)	0.705
Type 3 (subtotal/total) vs Type 1	0.807 (0.434–1.499)	0.498
Drainage: Active suction vs n	1.301 (0.798–2.123)	0.292
SMAS flap: y/n	1.168 (0.469–2.906)	0.738
Surgery duration: as a continuous variable	0.997 (0.992–1.001)	0.142
Class 2 (Primary malignant parotid T) vs Class 1 (Benign parotid T)	1.226 (0.676–2.223)	0.503
Class 3 (Non-parotid primary T) vs Class 1	0.829 (0.501–1.373)	0.466

Table S2: Multivariate logistic regression for wound healing perioperative complications after parotidectomy (surgical procedures: $n=436$). Abbreviation: BMI= Body Mass Index

Multivariate Logistic Regression Table		
Factor	Odds Ratio (95% CI)	<i>p</i> -value
BMI (kg/m ²): as a continuous variable	1.050 (1.001–1.101)	0.048

Table S3: Univariate logistic regression with selected variables for perioperative occurrence of seroma (surgical procedures: $n = 436$). Variables with a *p*-value < 0.2 selected for multivariate logistic analysis are in colored lines. Abbreviations: y: yes, n: no, ASA: American Society of Anesthesiologists, BMI: Body Mass Index, RT: radiotherapy, T: tumor, res.: resection, ND: neck dissection, SMAS: Superficial Musculoaponeurotic System

Variable	Odds Ratio (95% CI)	<i>p</i> -value
Age at surgery: as a continuous variable	0.999 (0.986–1.012)	0.880
Gender: F/M	0.747 (0.460–1.213)	0.238
ASA score: ASA 2 vs 1	0.900 (0.502–1.613)	0.723
ASA score: ASA 3 vs 1	1.031 (0.423–2.513)	0.947
BMI (kg/m ²): as a continuous variable	1.027 (0.981–1.075)	0.263
Active smoking: y/n	0.799 (0.475–1.342)	0.396
Previous head & neck RT: y/n	0.847 (0.182–3.940)	0.832
Previous parotid surgery: y/n	0.460 (0.105–2.021)	0.303
Group 2 (Parotidectomy + ND) vs. Group 1 (Parotidectomy alone)	0.495 (0.145–1.690)	0.261
Group 3 (Parotidectomy + other T res.) vs. Group 1	0.565 (0.192–1.665)	0.301
Group 4 (Parotidectomy + ND + other T res.) vs. Group 1	0.989 (0.389–2.513)	0.982
Type 2 (complete superficial) vs. Type 1 (partial superficial)	0.899 (0.486–1.663)	0.734
Type 3 (subtotal/total) Type 1	0.743 (0.357–1.546)	0.427
Drainage: Active Suction vs. n	1.857 (0.978–3.527)	0.059
SMAS flap: y/n	1.673 (0.483–5.794)	0.417
Surgery duration: as a continuous variable	0.995 (0.990–1.001)	0.095
Class 2 (Primary malignant parotid T) vs. Class 1 (Benign parotid T)	1.554 (0.789–3.060)	0.202
Class 3 (Non-parotid primary T) vs. Class 1	1.135 (0.631–2.042)	0.672

Table S4: Multivariate logistic regression for occurrence of seromas (surgical procedures: $n=436$)

Multivariate Logistic Regression Table		
Factor	Odds Ratio (95% CI)	<i>p</i> -value
Drainage: Active suction y/n	3.797 (1.117–12.901)	0.033

Table S5. Univariate logistic regression with selected variables for Clavien-Dindo grade > 1 complications (surgical procedures: $n = 436$). Variables with a p -value < 0.2 selected for multivariate logistic analysis are in colored lines. Abbreviations: y: yes, n: no, ASA: American Society of Anesthesiologists, BMI: Body Mass Index, RT: radiotherapy, T: tumor, res.: resection, ND: neck dissection, SMAS: Superficial Musculoaponeurotic System

Variable	Odds Ratio (95% CI)	p -value
Age at surgery: as a continuous variable	0.981 (0.968–0.994)	0.004
Gender: F/M	1.087 (0.669–1.765)	0.736
ASA score: ASA 2 vs 1	1.234 (0.672–2.265)	0.497
ASA score: ASA 3 vs 1	0.705 (0.250–1.985)	0.508
BMI (kg/m ²): as a continuous variable	1.019 (0.972–1.067)	0.436
Active smoking: y/n	1.666 (1.001–2.772)	0.050
Previous head & neck RT: y/n	0.289 (0.036–2.310)	0.242
Previous parotid surgery: y/n	0.602 (0.168–2.164)	0.437
Group 2 (Parotidectomy + ND) vs Group 1 (Parotidectomy alone)	0.816 (0.312–2.134)	0.678
Group 3 (Parotidectomy + other T res.) vs. Group 1	0.367 (0.106–1.272)	0.114
Group 4 (Parotidectomy + ND + other T res.) vs. Group 1	0.765 (0.271–2.162)	0.613
Type 2 (complete superficial) vs. Type 1 (partial superficial)	1.075 (0.504–2.289)	0.852
Type 3 (subtotal/total) vs. Type 1 (partial superficial)	2.963 (1.362–6.444)	0.006
Drainage: Active Suction vs. n	0.786 (0.448–1.381)	0.402
Neuromonitoring: y/n	1.130 (0.605–2.113)	0.701
SMAS flap: y/n	1.228 (0.386–3.904)	0.728
Surgery duration: as a continuous variable	0.999 (0.994–1.005)	0.806
Class 2 (Primary malignant parotid T) vs. Class 1 (Benign parotid T)	0.770 (0.425–1.395)	0.388
Class 3 (Non-parotid primary T) vs. Class 1	0.284 (0.096–0.834)	0.284 (0.096–0.834)

Table S6. Multivariate logistic regression for Clavien-Dindo grade > 1 complications (surgical procedures: $n = 436$)

Multivariate Logistic Regression Table		
Factor	Odds Ratio (95% CI)	p -Value
Age at surgery: as a continuous variable	0.981 (0.968–0.994)	0.006
Extent of parotidectomy: Type 3 vs. Type 1	2.866 (1.307–6.283)	0.009

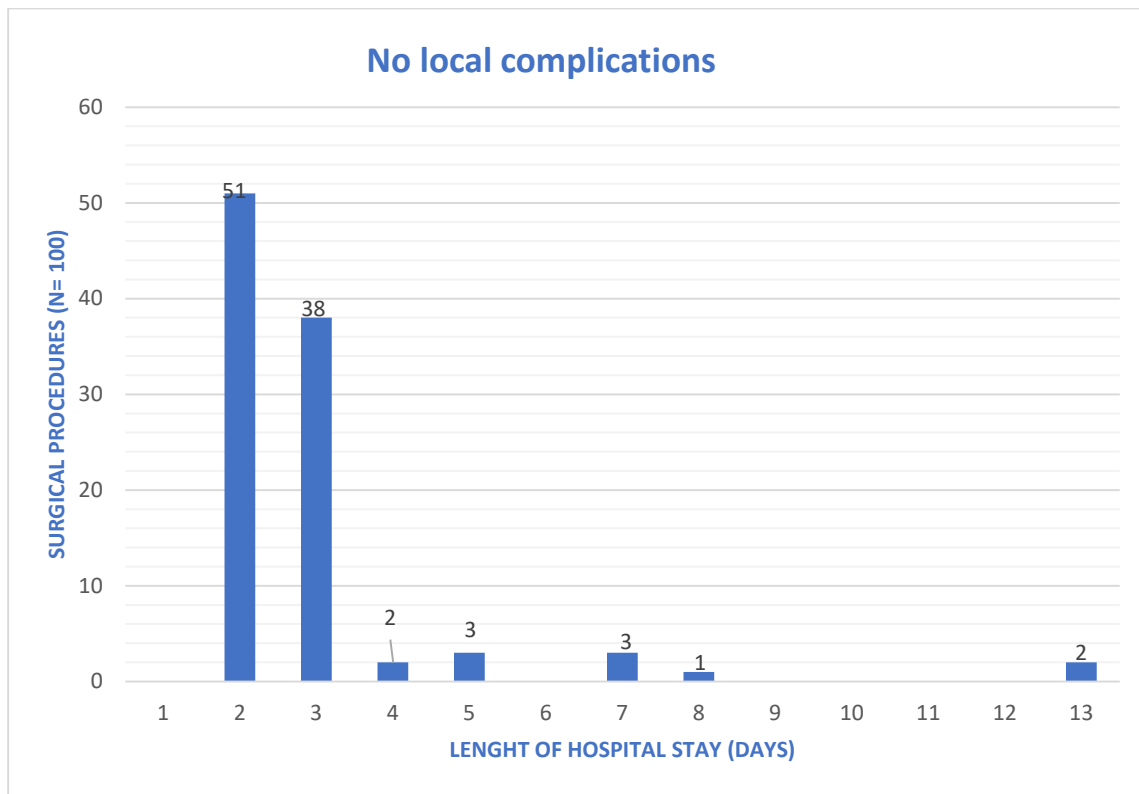


Figure S1. Length of hospital stay. Patients with no complication (surgical procedures: $n = 100$)

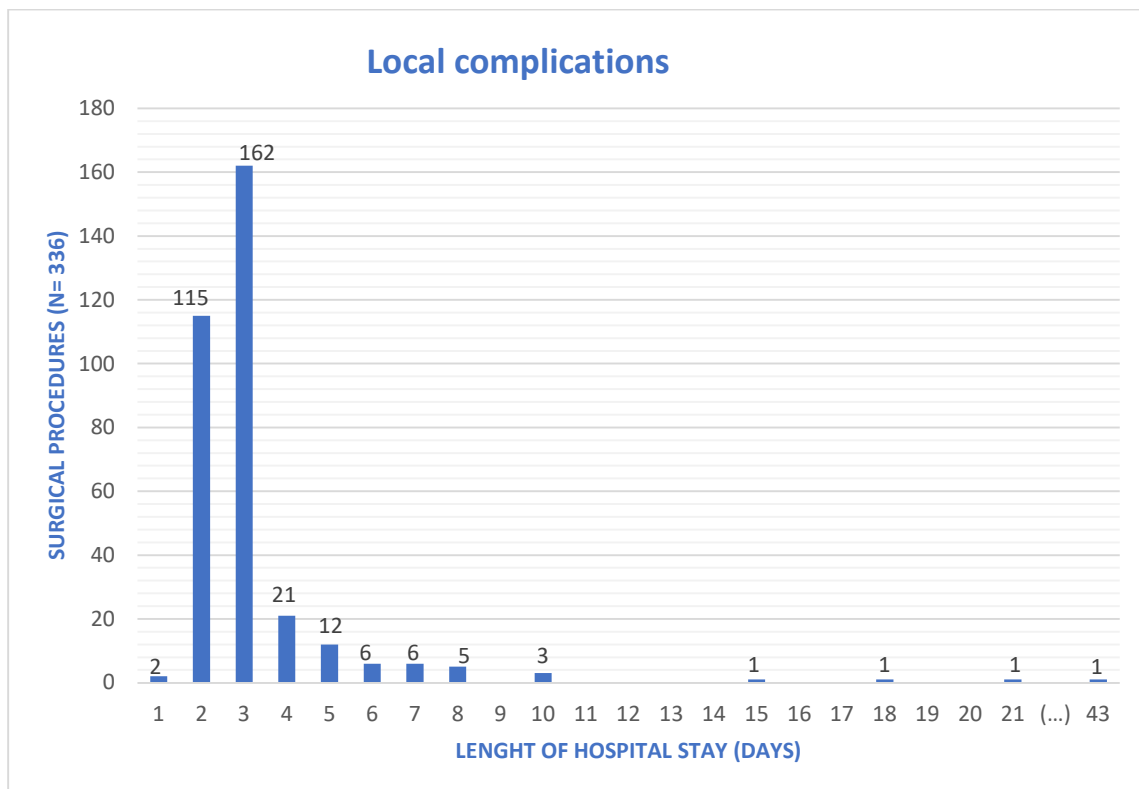


Figure S2. Length of hospital stay. Patients with complications (surgical procedures: $n = 336$)

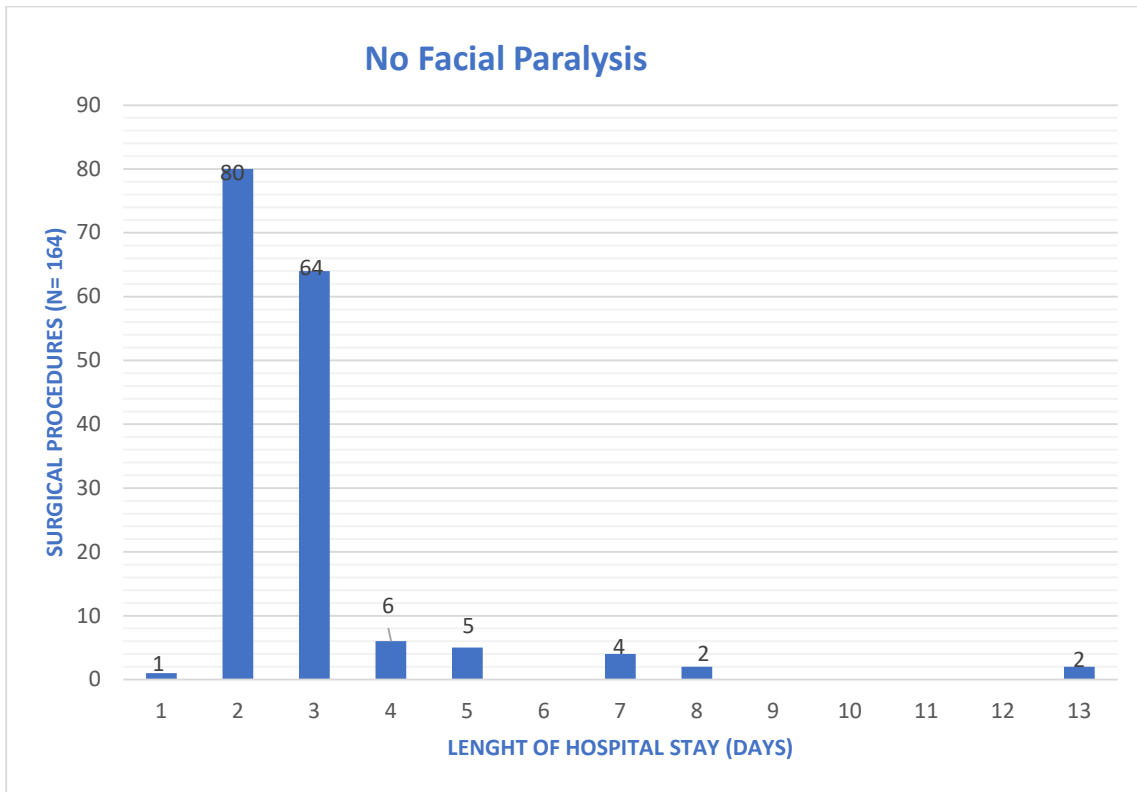


Figure S3. Length of hospital stay with no facial paralysis (surgical procedures: $n = 164$)

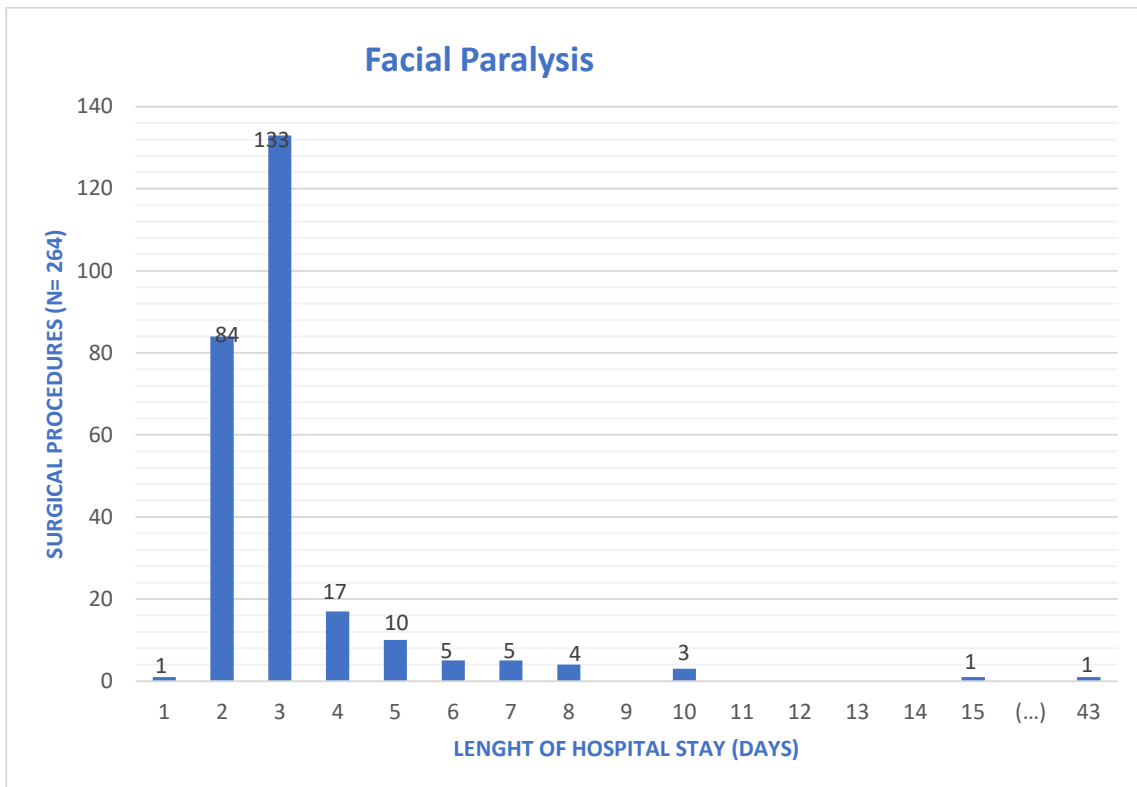


Figure S4. Length of hospital stay with facial paralysis (surgical procedures: $n = 264$)

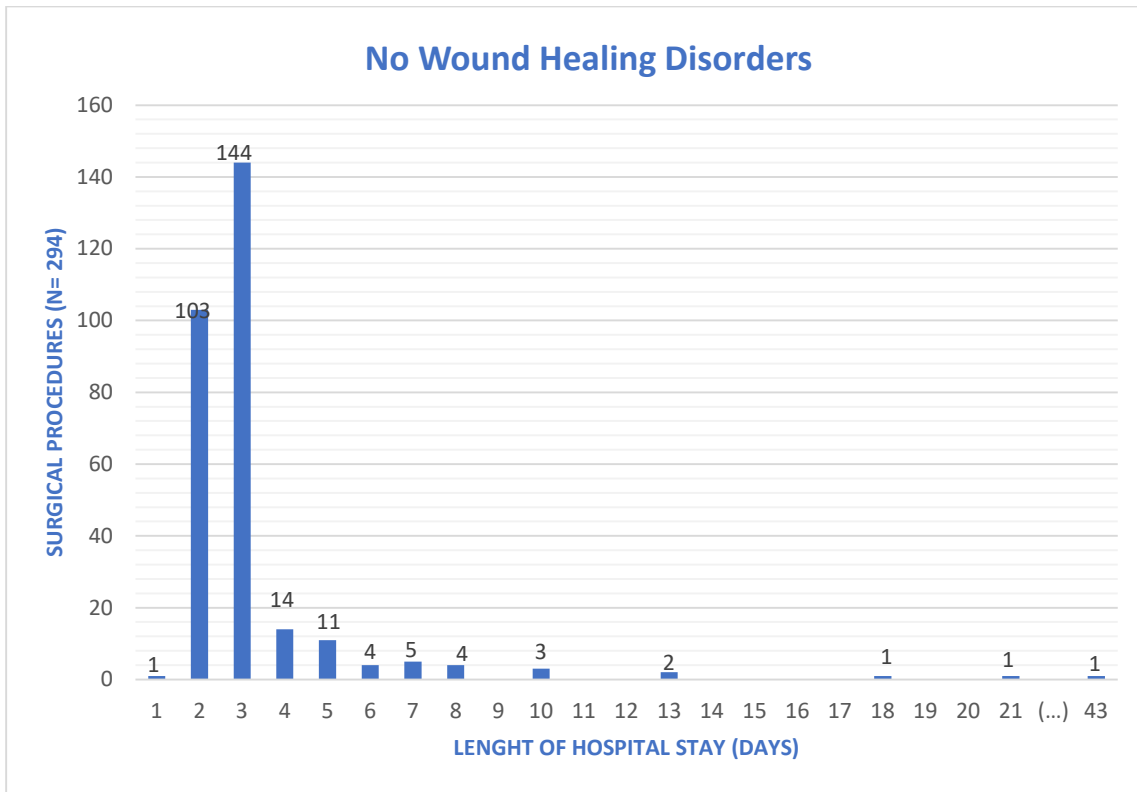


Figure S5. Length of hospital stay with no wound healing complication (surgical procedures: $n = 294$)

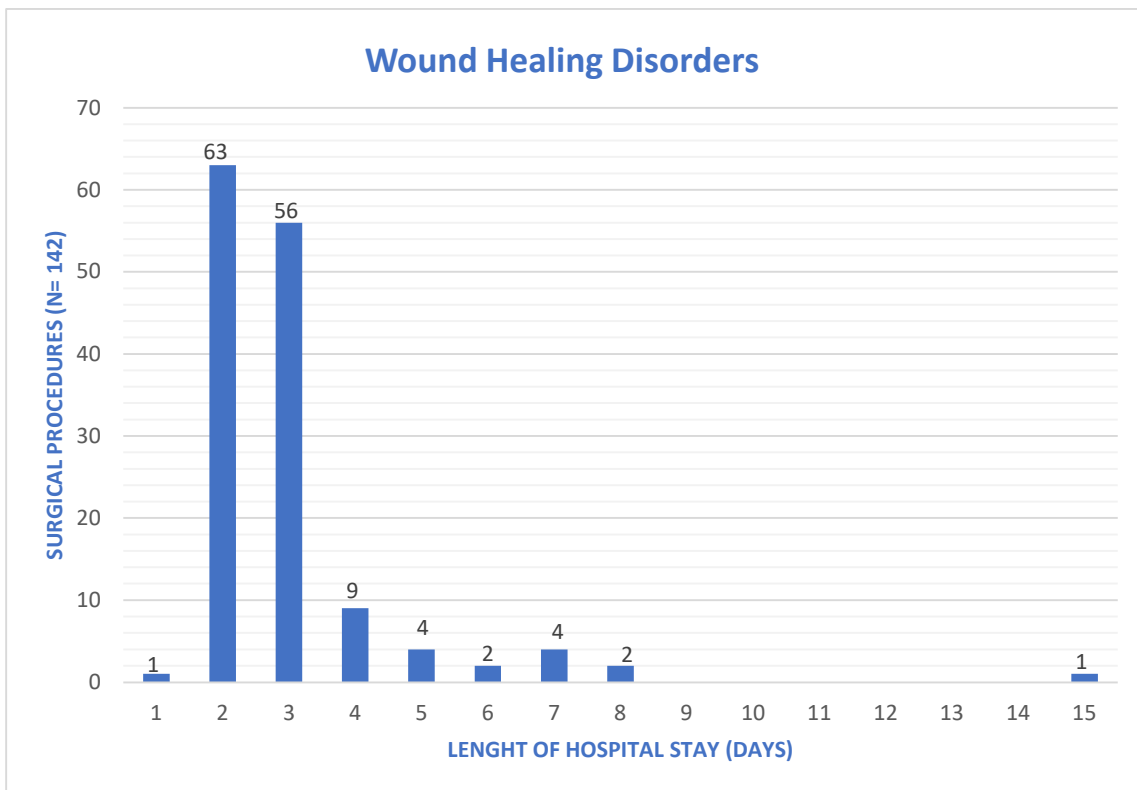


Figure S6. Length of hospital stay with wound healing complications (surgical procedures: $n = 142$)

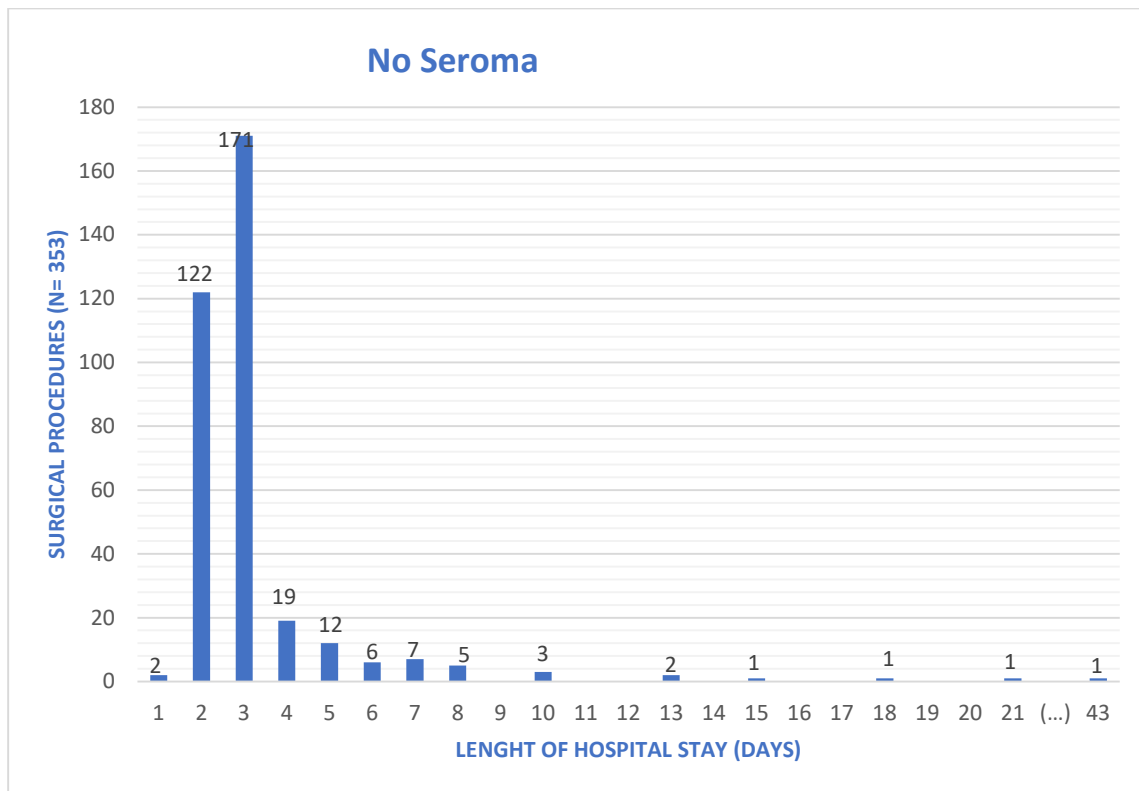


Figure S7. Length of hospital stay with no seroma/sialocele (surgical procedures: $n = 353$)

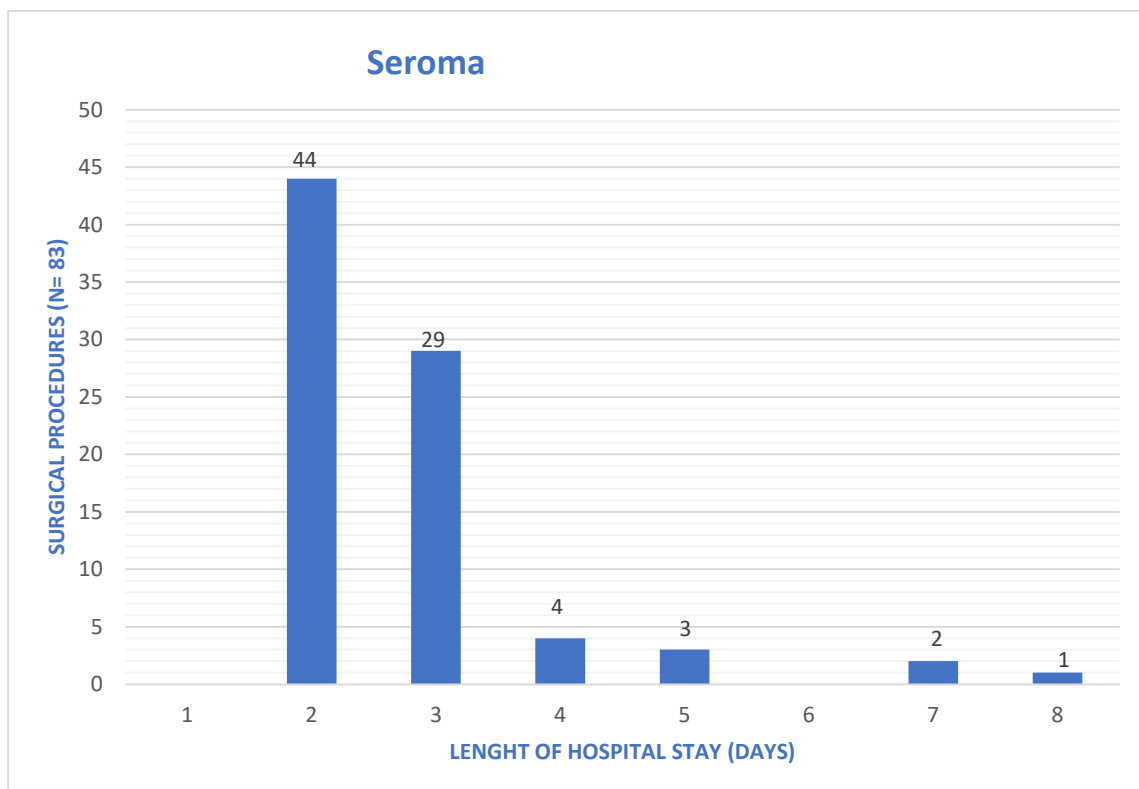


Figure S8. Length of hospital stay in patients with seromas/sialoceles (surgical procedures: $n = 83$)