

TABLE E-1 Percent-Predicted and Absolute Values of Pulmonary Function Tests (PFT) in 49 Patients of Group 1 (Posterior Spinal Arthrodesis and Iliac Crest Bone Graft)*

Pulmonary Function Test (Time effect)	Preop.	3 months	1 year	2 years	6.9 years
Forced vital capacity (p= 0.6285)	84.30 ± 16.6 (2.81 ± 0.77)	82.86 ± 13.42 (2.86 ± 0.60)	86.15 ± 12.97 (2.94 ± 0.54)	85.12 ± 12.03 $(3.13 \pm 0.59)†$	82.30 ± 14.71 $(3.23 \pm 0.74)†$
Forced expiratory volume in 1 sec (p= 0.5174)	80.59 ± 15.80 (2.41 ± 0.64)	77.95 ± 13.02 (2.43 ± 0.48)	80.41 ± 13.96 (2.46 ± 0.46)	83.10 ± 11.43 $(2.69 \pm 0.56)†$	80.20 ± 14.18 $(2.71 \pm 0.64)†$

*The values are given as the mean and standard deviation. The absolute values of the pulmonary function are given (in liters) in parentheses. †Significant difference in the value compared with preoperative value ($p < 0.05$).

TABLE E-2 Percent-Predicted and Absolute Values of Pulmonary Function Tests in 41 Patients of Group 2 (Posterior Spinal Arthrodesis and Thoracoplasty)*

Pulmonary Function Test (Time effect)	Preop.	3 months	1 year	2 years	6 years
Forced vital capacity (p<0.0001)	85.83 ± 16.18 (2.92 ± 0.71)	$67.83 \pm 12.12^\dagger$ ($p<0.0001$) (2.47 ± 0.71) †	$76.14 \pm 11.49^\dagger$ ($p<0.0001$) (2.74 ± 0.66)	$81.47 \pm 14.68^\dagger$ ($p=0.0113$) (3.04 ± 0.58)	$76.23 \pm 11.12^\dagger$ ($p=0.0005$) (3.04 ± 0.58)
Forced expiratory volume in 1 sec (p<0.0001)	79.84 ± 15.80 (2.43 ± 0.71)	$66.01 \pm 12.56^\dagger$ ($p<0.0001$) (2.10 ± 0.56) †	$70.62 \pm 10.31^\dagger$ ($p=0.0002$) (2.30 ± 0.47)	77.92 ± 15.43 ($p=0.2203$) (2.56 ± 0.52)	$72.48 \pm 10.49^\dagger$ ($p=0.0090$) (2.52 ± 0.47)

*The values are given as the mean and standard deviation. The absolute values of the pulmonary function are given (in liters) in parentheses. † Significant difference in the value compared with preoperative value ($p< 0.05$).

TABLE E-3 Percent-Predicted and Absolute Values of Pulmonary Function Tests in 16 Patients of Group 3 (Anterior Spinal Arthrodesis and Rib Resection Thoracotomy)*

Pulmonary Function Test (Time effect)	Preop.	3 months	1 year	2 years	5 years
Forced vital capacity (P<0.0001)	89.51 ± 17.51 (3.07 ± 0.59)	$69.75 \pm 21.69^\dagger$ $(P<0.0001)$ $(2.44 \pm 0.67)^\dagger$	$75.29 \pm 11.78^\dagger$ $(P=0.0002)$ $(2.71 \pm 0.37)^\dagger$	$79.91 \pm 18.97^\dagger$ $(P=0.0082)$ (2.96 ± 0.57)	$74.50 \pm 14.56^\dagger$ $(P<0.0001)$ $(2.83 \pm 0.44)^\dagger$
Forced expiratory volume in 1 sec (P<0.0001)	83.39 ± 17.28 (2.67 ± 0.70)	$71.14 \pm 17.93^\dagger$ $(P=0.0002)$ $(2.40 \pm 0.77)^\dagger$	76.65 ± 13.63 $(P=0.1560)$ (2.47 ± 0.38)	77.00 ± 15.52 $(P=0.1675)$ (2.56 ± 0.43)	$72.06 \pm 11.74^\dagger$ $(P=0.0019)$ (2.43 ± 0.33)

*The values are given as the mean and standard deviation. The absolute values of the pulmonary function are given (in liters) in parentheses. †Significant difference in the value compared to preoperative value ($p<0.05$).

TABLE E-4 Percent-Predicted and Absolute Values of Pulmonary Function Tests in 12 Patients of Group 4 (Anterior and Posterior Spinal Arthrodesis)*

Pulmonary Function Test (Time effect)	Preop.	3 months	1 year	2 years	5 years
Forced vital capacity ($p < 0.0001$)	80.93 ± 12.53 (2.38 ± 0.62)	$66.13 \pm 12.32\ddagger$ $(p=0.0002)$ $(2.11 \pm 0.54)\ddagger$	$72.82 \pm 16.26\ddagger$ $(p=0.0464)$ (2.33 ± 0.60)	72.60 ± 15.92 $(p=0.0842)$ (2.44 ± 0.51)	$70.00 \pm 10.82\ddagger$ $(p=0.0175)$ (2.55 ± 0.45)
Forced expiratory volume in 1 sec $(p=0.0499)$	73.48 ± 12.82 (2.00 ± 0.62)	$59.09 \pm 10.54\ddagger$ $(p=0.0197)$ $(1.65 \pm 0.42)\ddagger$	71.09 ± 18.64 $(p=0.6754)$ (1.97 ± 0.61)	70.40 ± 18.24 $(p=0.6618)$ (2.09 ± 0.53)	67.08 ± 12.38 $(p=0.1598)$ (2.14 ± 0.40)

*The values are given as the mean and standard deviation. The absolute values of the pulmonary function are given (in liters) in parentheses. ‡Significant difference in the value compared to preoperative value ($P < 0.05$).