Table 25-1 One-Way ANOVA: Change in Pain-Free Elbow ROM Following Treatment for Tendinitis

ONEWAY ROM BY Group
/STATISTICS DESCRIPTIVES HOMOGENEITY
/MISSING ANALYSIS.

Descriptives

ROM

					95% Confidence Interval for			
			Std.		Mean			
	N	Mean	Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
Ice	11	44.18	10.870	3.278	36.88	51.48	23	58
NSAID	11	45.27	8.403	2.534	39.63	50.92	29	56
Splint	11	35.27	9.509	2.867	28.88	41.66	19	49
Rest	11	24.09	8.538	2.574	18.36	29.83	14	37
Total	44	37.20	12.487	1.883	33.41	41.00	14	58

Oneway

Run using Compare means>One-way ANOVA/ Options: Descriptive, Homogeneity of variance test. This procedure does not include an option for power analysis. See below for same analysis using General Linear Model.

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
ROM	Based on Mean	.329	3	40	.804
	Based on Median	.168	3	40	.917
	Based on Median and with	.168	3	36.295	.917
	adjusted df				
	Based on trimmed mean	.305	3	40	.821

ANOVA

ROM

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3184.250	3	1061.417	12.058	.000
Within Groups	3520.909	40	88.023		
Total	6705.159	43			

/PLOT=PROFILE(Group) TYPE=LINE ERRORBAR=NO MEANREFERENCE=NO YAXIS=AUTO /PRINT ETASQ DESCRIPTIVE HOMOGENEITY OPOWER /CRITERIA=ALPHA(.05) /DESIGN=Group.

Univariate Analysis of Variance

Run using General Linear Model/Univariate/Options: Descriptive statistics, Estimates of effect size, Observed power, Homogeneity tests

Between-Subjects Factors

		Value Label	N
Group	1	Ice	11
	2	NSAID	11
	3	Splint	11
	4	Rest	11

Descriptive Statistics

Dependent Variable: ROM

Group	Mean	Std. Deviation	N
Ice	44.18	10.870	11
NSAID	45.27	8.403	11
Splint	35.27	9.509	11
Rest	24.09	8.538	11
Total	37.20	12.487	44

Levene's Test of Equality of Error Variances^{a,b}

		Levene Statistic	df1	df2	Sig.
ROM	Based on Mean	.329	3	40	.804
	Based on Median	.168	3	40	.917
	Based on Median and with adjusted df	.168	3	36.295	.917
	Based on trimmed mean	.305	3	40	.821

Tests the null hypothesis that the error variance of the dependent variable is equal across groups. a,b

a. Dependent variable: ROMb. Design: Intercept + Group

Tests of Between-Subjects Effects

Dependent Variable: ROM

•	Type III Sum of					Partial Eta
Source	Squares	df	Mean Square	F	Sig.	Squared
Corrected Model	3184.250a	3	1061.417	12.058	.000	.475
Intercept	60903.841	1	60903.841	691.910	.000	.945
Group	3184.250	3	1061.417	12.058	.000	.475
Error	3520.909	40	88.023			
Total	67609.000	44				
Corrected Total	6705.159	43				

Tests of Between-Subjects Effects

Dependent Variable: ROM

Source	Noncent. Parameter	Observed Power ^b
Corrected Model	36.175	.999
Intercept	691.910	1.000
Group	36.175	.999
Error		
Total		
Corrected Total		

a. R Squared = .475 (Adjusted R Squared = .436)

Profile Plots

b. Computed using alpha = .05

