

Table 1: Demographic and clinical data of the three studied groups (n=68)

| Demographic and clinical data | Group I (n = 23) | Group II (n = 22) | Group II (n = 23) | Test of Sig. | <i>p</i> |
|--------------------------------------|-----------------------------|------------------------------|------------------------------|-------------------------|-----------------|
| Age (year) | | | | H = 3.37 | 0.185 |
| Min. – Max. | 29 – 73 | 28 – 75 | 30 – 70 | | |
| Mean \pm SD | 46.2 \pm 11.2 | 45.6 \pm 11.2 | 50.3 \pm 11.3 | | |
| Median | 46 | 44.5 | 51 | | |
| BMI (kg/m²) | | | | H = 2.43 | 0.297 |
| Min. – Max. | 25 – 42 | 23 – 46 | 27 – 49 | | |
| Mean \pm SD | 33.14 \pm 4.8 | 35.5 \pm 6.11 | 35.1 \pm 4.7 | | |
| Median | 32.8 | 35.8 | 35.7 | | |
| Disease duration (years) | | | | H = 1.27 | 0.529 |
| Min. – Max. | 1 – 30 | 1 – 20 | 0.3 – 40 | | |
| Mean \pm SD | 7.7 \pm 8.5 | 4.8 \pm 4.6 | 6.3 \pm 10 | | |
| Median | 3 | 3 | 3 | | |
| Parity | | | | H = 0.643 | 0.725 |
| Min. – Max. | 0-7 | 0-9 | 0-10 | | |
| Median | 3 | 4 | 4 | | |

Min. for minimum, Max. for maximum, SD for standard deviation., n for number of patients, BMI for body mass index.

H and *p* values for Kruskal Wallis test for comparing the three groups.

* for Statistical significant at $p \leq 0.05$.

Table 2: comparison between the three studied groups regarding the assessed questionnaires before the intervention (n=68)

| QUID Before intervention | Group I (n = 23) | Group II (n = 22) | Group III (n = 23) | Test of Sig. | <i>p</i> |
|-----------------------------------|---------------------|----------------------|-----------------------|-----------------|----------|
| QUID (SUI) | | | | | |
| Min. – Max. | 4 – 15 | 4 – 15 | 5 – 15 | H = 2 | 0.368 |
| Mean ± SD | 9.7 ± 3.87 | 9 ± 2.67 | 10.3 ± 3 | | |
| Median | 9 | 9 | 10 | | |
| QUID (UII) | | | | | |
| Min. – Max. | 6 – 15 | 6 – 15 | 7 – 15 | H = 1.98 | 0.370 |
| Mean ± SD | 11.1 ± 2.96 | 12 ± 2.81 | 12.4 ± 2.38 | | |
| Median | 12 | 12 | 12 | | |
| QUID (Total) | | | | | |
| Min. – Max. | 10-30 | 15-30 | 17-30 | H = 2.2 | 0.337 |
| Mean ± SD | 20.9 ±5.6 | 21±4.1 | 22.7±4 | | |
| Median | 22 | 19.5 | 24 | | |
| Australian PFQ | | | | | |
| Min. – Max. | 4 – 21.7 | 4.1 – 22.8 | 4.5 – 23.2 | H =0.07 | 0.965 |
| Mean ± SD | 14.5± 5.3 | 14.2± 5.7 | 14.1± 6 | | |
| Median | 15.7 | 15 | 13.8 | | |
| ICIQ-UI-SF | | | | | |
| Min. – Max. | 7 – 23 | 9 – 21 | 90 – 21 | H = 1.2 | 0.564 |
| Mean ± SD | 14.6 ± 4.4 | 15.2±3.6 | 14 ± 3.6 | | |
| Median | 13 | 14.5 | 13 | | |
| Twenty-four hour leaking episodes | | | | | |
| Min. – Max. | 2-8 | 3-7 | 2-8 | H = 0.035 | 0.983 |
| Mean ± SD | 4.3 ± 1.7 | 4.18 ± 1.2 | 4.3 ± 1.6 | | |
| Median | 4 | 4 | 4 | | |

QUID for questionnaire for female urinary incontinence diagnosis, SUI for stress urinary incontinence, UII for urge urinary incontinence, Min. for minimum, Max. for maximum, SD for standard deviation, ICIQ-UI-SF for International Consultation on Incontinence Questionnaire-Urinary Incontinence-Short Form, PFQ for pelvic floor questionnaire, n for number of patients.

H and *p* values for Kruskal Wallis test for comparing the three groups.

* for Statistical significant at $p \leq 0.05$

Table 3: Frequencies of the grades of Modified Oxford Muscle Grading System per rectum and per vagina examination for the three studied groups before the intervention.

| MOS Before intervention | Group I (n = 23) | | Group II (n = 22) | | Group II (n = 23) | | Test of Sig. | p |
|----------------------------|---------------------|-------|----------------------|-------|----------------------|-------|-----------------------|-------|
| Per rectum | | | | | | | | |
| | (n) | % | (n) | % | (n) | % | | |
| 1 | 0 | 0% | 0 | 0% | 1 | 4.3% | X ² = 10.7 | 0.218 |
| 2 | 0 | 0% | 1 | 4.5% | 0 | 0% | | |
| 3 | 9 | 39.1% | 15 | 68.2% | 15 | 65.2% | | |
| 4 | 13 | 56.5% | 6 | 27.3% | 6 | 26.1% | | |
| 5 | 1 | 4.3% | 0 | 0% | 1 | 4.3% | | |
| Per vagina | | | | | | | | |
| 1 | 0 | 0% | 0 | 0% | 1 | 4.3% | X ² = 7.03 | 0.318 |
| 2 | 3 | 13% | 1 | 4.5% | 0 | 0% | | |
| 3 | 13 | 56.5% | 15 | 68.2% | 18 | 78.3% | | |
| 4 | 7 | 30.4% | 6 | 27.3% | 4 | 17.4% | | |
| 5 | 0 | 0% | 0 | 0% | 0 | 0% | | |

MOS for modified oxford Muscle Grading System, (n) for number of patients.

X² and *p* values for Chi square test for comparing between the three groups.

* for statistical significant at $p \leq 0.05$.

Table 4: Comparison of the manometric pressure assessment in the three groups before the intervention

| Manometric pressure Before intervention | Group I (n = 23) | Group II (n = 22) | Group III (n = 23) | Test of Sig. | <i>p</i> |
|--|---------------------|----------------------|-----------------------|--------------|----------|
| Anal resting pressure (hPa) | | | | | |
| Min.-Max. | 20-135 | 13-170 | 15-140 | H=2.9 | 0.223 |
| Mean ± SD | 61.2 ± 30.3 | 72 ± 40.4 | 81.3 ± 38.8 | | |
| Median | 63 | 66.5 | 65 | | |
| Anal max. squeezing Pressure (hPa) | | | | | |
| Min.-Max. | 15-140 | 4-120 | 3-75 | H=1.2 | 0.530 |
| Mean ± SD | 54 ± 30.7 | 51.6 ± 40.2 | 41.7 ± 18 | | |
| Median | 50 | 37.5 | 43 | | |
| Vaginal max. squeezing Pressure (hPa) | | | | | |
| Min.-Max. | 10-80 | 5-45 | 11-80 | H=1.7 | 0.408 |
| Mean ± SD | 34 ± 16.7 | 27.7 ± 12.2 | 29.5 ± 15.6 | | |
| Median | 30 | 25.5 | 25 | | |

Min. for minimum, Max. for maximum, (n) for number of patients, (hPa) for Hectopascal.

H and *p* values for Kruskal Wallis test for comparing the three groups.

* for statistical significant at $p \leq 0.05$

Table 5: Comparison of the assessed questionnaires before and after the intervention among the three studied groups

| Questionnaire | Group I | | Test of sig. | p | Group II | | Test of sig. | p | Group III | | Test of sig. | p |
|----------------------------------|---------------------|--------------------|--------------|-----------|---------------------|--------------------|--------------|-----------|---------------------|--------------------|--------------|-----------|
| | Before intervention | After intervention | | | Before intervention | After intervention | | | Before intervention | After intervention | | |
| QUID (SUI) | | | | | | | | | | | | |
| Min. – Max. | 4 – 15 | 0 - 15 | Z=-3.5 | ≤ 0.0001* | 4 – 15 | 0-15 | Z= -3.6 | ≤ 0.0001* | 5 – 15 | 0 – 15 | Z= -3.74 | ≤ 0.0001* |
| Mean ± SD | 9.7 ± 3.87 | 5.39 ± 4.4 | | | 9 ± 2.67 | 4.59 ± 4.2 | | | 10.3 ± 3 | 5.2 ± 5 | | |
| Median | 9 | 4 | | | 9 | 3 | | | 10 | 3 | | |
| Percentage of improvement 43.6% | | | | | 52.4 % | | | | 51.3 % | | | |
| QUID (UII) | | | | | | | | | | | | |
| Min. – Max. | 6 – 15 | 0-15 | Z= -3.7 | ≤ 0.0001* | 6 – 15 | 0 -15 | Z= -3.7 | ≤ 0.0001* | 7 – 15 | 0 – 15 | Z= -3.64 | ≤ 0.0001* |
| Mean ± SD | 11.1 ± 2.96 | 5.7 ± 4.1 | | | 12 ± 2.81 | 5.9 ± 4.5 | | | 12.4 ± 2.38 | 6.13 ± 4.98 | | |
| Median | 12 | 4 | | | 12 | 3.5 | | | 12 | 3 | | |
| Percentage of improvement 47.8 % | | | | | 52.2% | | | | 49 % | | | |
| QUID (Total) | | | | | | | | | | | | |
| Min. – Max. | 10-30 | 2-27 | Z= -3.7 | ≤ 0.0001* | 15-30 | 0-30 | Z= -3.8 | ≤ 0.0001* | 17 – 30 | 2 - 30 | Z= -3.7 | ≤ 0.0001* |
| Mean ± SD | 20.9 ±5.6 | 11.1± 8 | | | 21 ± 4.1 | 10.5 ± 8.5 | | | 22.7 ± 4 | 11.3 ± 9.7 | | |
| Median | 22 | 8 | | | 19.5 | 6 | | | 24 | 6 | | |
| Percentage of improvement 45.7 % | | | | | 52 % | | | | 50.7 % | | | |
| Global PFO | | | | | | | | | | | | |
| Min. – Max. | 4 – 21.7 | 0.67-23.73 | Z=-3.4 | 0.001* | 4.1 – 22.8 | 1-23.86 | Z= 3.8 | ≤ 0.0001* | 4.5 – 23.2 | 0.52 – 26.1 | Z= -3.28 | 0.001* |
| Mean ± SD | 14.5±5.3 | 11.3 ±6.5 | | | 14.2 ± 5.7 | 11 ± 6.3 | | | 14.1 ± 6 | 10.8 ± 7.6 | | |
| Median | 15.7 | 11.9 | | | 15 | 11.2 | | | 13.8 | 10.6 | | |
| Percentage of improvement 28.1 % | | | | | 24.6 % | | | | 28 % | | | |
| ICIQ-UI-SF | | | | | | | | | | | | |
| Min. – Max. | 7-23 | 0-22 | Z=-3.6 | ≤ 0.0001* | 9 - 21 | 0 – 19 | Z = 4.18 | ≤ 0.0001* | 9 – 21 | 2 – 21 | Z = -3.88 | ≤ 0.0001* |
| Mean ± SD | 9.7 ± 3.87 | 8.8±6.54 | | | 15.2 ± 3.6 | 8.8 ± 5.3 | | | 14 ± 3.6 | 7.8 ± 5.7 | | |
| Median | 9 | 6 | | | 14.5 | 9 | | | 13 | 6 | | |
| Percentage of improvement41.2% | | | | | 43.4 % | | | | 46.5 % | | | |
| 24 hours leaking episodes | | | | | | | | | | | | |
| Min. – Max. | 2-8 | 0-7 | Z = -3.6 | ≤ 0.0001* | 3 – 7 | 0 – 7 | Z = -3.4 | 0.001* | 2-8 | 0 – 6 | Z = -3.86 | ≤ 0.0001* |
| Mean ± SD | 4.3 ± 1.7 | 1.9 ± 2.1 | | | 4.18 ± 1.2 | 2 ± 1.9 | | | 4.3 ± 1.6 | 1.8 ± 1.97 | | |
| Median | 4 | 1 | | | 4 | 1 | | | 4 | 1 | | |
| Percentage of improvement 54.2 % | | | | | 58.3 % | | | | 66.4 % | | | |

QUID for Questionnaire for female urinary incontinence diagnosis, SUI for stress urinary incontinence, UII for urge urinary incontinence, PFQ for pelvic floor questionnaire, ICIQ-UI-SF for International Consultation on Incontinence Questionnaire - Urinary Incontinence - Short Form, Min. for minimum, Max. for maximum, (n) for number of patients. SD for standard deviation.

Z and p values for Wilcoxon Signed Rank Test for comparing two related samples.

Table 6: Comparison of the Modified Oxford Muscle Grading System before and after the intervention per rectum and per vaginal examination among the three studied groups

| MOS | Group I | | | | Test of Sig. | p | Group II | | | | Test of Sig. | p | Group III | | | | Test of Sig. | p |
|---------------------------------|---------------------|-------|--------------------|-------|--------------|--------|---------------------|-------|--------------------|-------|--------------|--------|---------------------|-------|--------------------|-------|--------------|--------|
| | Before intervention | | After intervention | | | | Before intervention | | After intervention | | | | Before intervention | | After intervention | | | |
| | (n) | % | (n) | % | | | (n) | % | (n) | % | | | (n) | % | (n) | % | | |
| Per rectum | | | | | | | | | | | | | | | | | | |
| 1 | 0 | 0% | 0 | 0% | Z = -2.8 | 0.004* | 0 | 0% | 0 | 0% | Z = -2.97 | 0.003* | 1 | 4.3% | 0 | 0% | Z = -3.36 | 0.001* |
| 2 | 0 | 0% | 0 | 0% | | | 1 | 4.5% | 0 | 0% | | | 0 | 0% | 0 | 0% | | |
| 3 | 9 | 39.1% | 4 | 17.4% | | | 15 | 68.2% | 6 | 27.3% | | | 15 | 65.2% | 7 | 30.4% | | |
| 4 | 13 | 56.5% | 13 | 56.5% | | | 6 | 27.3% | 15 | 68.2% | | | 6 | 26.1% | 13 | 56.5% | | |
| 5 | 1 | 4.3% | 6 | 26.1% | | | 0 | 0% | 1 | 4.5% | | | 1 | 4.3% | 3 | 13.0% | | |
| Percentage of improvement 8.7 % | | | | | | | 10.9 % | | | | | 11.3% | | | | | | |
| Per vagina | | | | | | | | | | | | | | | | | | |
| 1 | 0 | 0% | 0 | 0% | Z = -3.2 | 0.001* | 0 | 0% | 0 | 0% | Z= -3.16 | 0.002* | 1 | 4.3% | 0 | 0% | Z=-3.36 | 0.001* |
| 2 | 3 | 13% | 1 | 4.3% | | | 1 | 4.5% | 1 | 4.5% | | | 0 | 0% | 0 | 0% | | |
| 3 | 13 | 56.5% | 6 | 26.1% | | | 15 | 68.2% | 6 | 27.3% | | | 18 | 78.3% | 8 | 34.8% | | |
| 4 | 7 | 30.4% | 12 | 52.2% | | | 6 | 27.3% | 14 | 63.6% | | | 4 | 17.4% | 12 | 52.2% | | |
| 5 | 0 | 0% | 4 | 14.4% | | | 0 | 0% | 1 | 4.5% | | | 0 | 0% | 3 | 13.0% | | |
| Percentage of improvement 13 % | | | | | | | 9 % | | | | | 14 % | | | | | | |

MOS for Modified Oxford Muscle Grading System, (n) for number of patients, % for percentage.

Z and p values for Wilcoxon Signed Rank Test for comparison before and after intervention in the same group.

* for statistical significant at $p \leq 0.05$.

Table 7: Comparison of the assessed manometric parameters before and after the intervention among the three studied groups

| Manometric pressure | Group I | | | | Group II | | | | Group III | | | |
|---------------------------------------|---------------------|--------------------|--------------|----------|---------------------|--------------------|--------------|-------|---------------------|--------------------|--------------|--------|
| | Before intervention | After intervention | Test of Sig. | p | Before intervention | After intervention | Test of Sig. | p | Before intervention | After intervention | Test of Sig. | p |
| Anal resting pressure (hPa) | | | | | | | | | | | | |
| Min.-Max. | 20 – 135 | 20 – 130 | Z= -3.1 | 0.002* | 13 – 170 | 20 – 140 | Z= -1 | 0.312 | 150 – 140 | 15 – 150 | Z = -3.08 | 0.002* |
| Mean ± SD | 61.2 ± 30.3 | 72.4 ± 28.3 | | | 71.9 ± 40.45 | 77 ± 33.8 | | | 81.2 ± 38.8 | 88.6 ± 42.5 | | |
| Median | 63 | 79 | | | 66.5 | 73 | | | 65 | 85 | | |
| Percentage of improvement | 29.3 % | | | | 25.8 % | | | | 9.5 % | | | |
| Anal max. squeezing Pressure (hPa) | | | | | | | | | | | | |
| Min.-Max. | 15-140 | 13-156 | Z=-3.5 | ≤0.0001* | 4 – 120 | 9 – 140 | Z= -1.5 | 0.130 | 3 – 75 | 9 – 90 | Z = -3.35 | 0.001* |
| Mean ± SD | 54 ± 30.6 | 65.3 ± 35.4 | | | 51.6 ± 40.2 | 55.1 ± 39.5 | | | 41.7 ± 18 | 50.5 ± 21.1 | | |
| Median | 50 | 63 | | | 37.5 | 42.5 | | | 43 | 60 | | |
| Percentage of improvement | 23.8 % | | | | 31.3 % | | | | 29.5 % | | | |
| Vaginal max. squeezing Pressure (hPa) | | | | | | | | | | | | |
| Min.-Max. | 10 – 80 | 20 – 71 | Z= -2.8 | 0.004* | 5 – 45 | 5 – 60 | Z= -1.1 | 0.269 | 11 – 80 | 15 – 90 | Z = -2.7 | 0.006* |
| Mean ± SD | 34 ± 16.7 | 43 ± 13.5 | | | 27.7 ± 12.2 | 29.6 ± 14.4 | | | 29.5 ± 15.6 | 34 ± 16.3 | | |
| Median | 30 | 42 | | | 25.5 | 28 | | | 25 | 30 | | |
| Percentage of improvement | 47.8 % | | | | 12.6 % | | | | 21.5 % | | | |

Min. for minimum, Max. for maximum, SD for standard deviation, hPa for hectopascal.

Z and p values for Wilcoxon Signed Rank Test for comparison before and after intervention in the same group.

* for statistical significant at $p \leq 0.05$.

Table 8: Comparison between the three studied groups regarding the assessed questionnaires after the intervention (n=68)

| QUID After intervention | Group I (n = 23) | Group II (n = 22) | Group III (n = 23) | Test of Sig. | p |
|-----------------------------------|----------------------------|-----------------------------|------------------------------|-------------------------------|----------|
| QUID (SUI) | | | | | |
| Min. – Max. | 0-15 | 0-15 | 0 - 15 | H = 1.56 | 0.457 |
| Mean \pm SD | 5.4 \pm 4.4 | 4.6 \pm 4.2 | 5.2 \pm 5 | | |
| Median | 4 | 3 | 3 | | |
| Percent of improvement | 43.6% | 52.4 % | 51.3 % | | |
| QUID (UUI) | | | | | |
| Min. – Max. | 0 – 15 | 0 – 15 | 0 - 15 | H = 0.08 | 0.957 |
| Mean \pm SD | 5.7 \pm 4.1 | 5.9 \pm 4.5 | 6.1 \pm 4.9 | | |
| Median | 4 | 3.5 | 3 | | |
| Percent of improvement | 47.8 % | 51.2% | 49 % | | |
| QUID (Total) | | | | | |
| Min. – Max. | 2 – 27 | 0 – 30 | 2 - 30 | H = 0.73 | 0.695 |
| Mean \pm SD | 11.1 \pm 8 | 10.5 \pm 8.5 | 11.3 \pm 9.7 | | |
| Median | 8 | 6 | 6 | | |
| Percent of improvement | 45.7 % | 52 % | 50.7 % | | |
| Australian PFQ | | | | | |
| Min. – Max. | 0.67-23.73 | 1-23.86 | 0.52 – 26.1 | H =0.15 | 0.927 |
| Mean \pm SD | 11.3 \pm 6.5 | 11 \pm 6.3 | 10.8 \pm 7.6 | | |
| Median | 11.9 | 11.2 | 10.6 | | |
| Percent of improvement | 28 % | 24.6 % | 28 % | | |
| ICIQ-UI-SF | | | | | |
| Min. – Max. | 0 - 21 | 0 – 19 | 2 - 21 | H = 0.713 | 0.711 |
| Mean \pm SD | 8.8 \pm 6.54 | 8.8 \pm 5.3 | 7.89 \pm 5.7 | | |
| Median | 6 | 9 | 6 | | |
| Percent of improvement | 41.2 % | 43.4 % | 46.6 % | | |
| 24 hours leaking episodes | | | | | |
| Min. – Max. | 0 - 7 | 0 – 7 | 0 - 6 | H = 0.631 | 0.729 |
| Mean \pm SD | 1.9 \pm 2.1 | 2 \pm 1.9 | 1.8 \pm 1.97 | | |
| Median | 1 | 1 | 1 | | |
| Percent of improvement | 54.2 % | 58.3 % | 66.4 % | | |

QUID for questionnaire for female urinary incontinence diagnosis, SUI for stress urinary incontinence, UUI for urge urinary incontinence, Min. for minimum, Max. for maximum, SD for standard deviation, ICIQ-UI-SF for International Consultation on Incontinence Questionnaire-Urinary Incontinence-Short Form, PFQ for pelvic floor questionnaire, n for number of patients.

H and *p* values for Kruskal Wallis test for comparing the three groups.

* for Statistical significant at $p \leq 0.05$

Table 9: Frequencies of the grades of Modified Oxford Muscle Grading System per rectum and per vagina examination for the three studied groups after the intervention

| MOS After intervention | Group I (n = 23) | | Group II (n = 22) | | Group II (n = 23) | | Test of Sig. | <i>p</i> |
|---------------------------|---------------------|-------|----------------------|-------|----------------------|-------|-------------------------|----------|
| Per rectum | (n) | % | (n) | % | (n) | % | | |
| 1 | 0 | 0% | 0 | 0% | 0 | 0% | X ² = 4.7 | 0.309 |
| 2 | 0 | 0% | 0 | 0% | 0 | 0% | | |
| 3 | 4 | 17.4% | 6 | 27.3% | 7 | 30.4% | | |
| 4 | 13 | 56.5% | 15 | 68.2% | 13 | 56.5% | | |
| 5 | 6 | 26.1% | 1 | 4.5% | 3 | 13.0% | | |
| Percentage of improvement | 8.7 % | | 10.9 % | | 11.3 % | | | |
| Per vagina | | | | | | | | |
| 1 | 0 | 0% | 0 | 0% | 0 | 0% | X ² =3.45 | 0.764 |
| 2 | 1 | 4.3% | 1 | 4.5% | 0 | 0% | | |
| 3 | 6 | 26.1% | 6 | 27.3% | 8 | 34.8% | | |
| 4 | 12 | 52.2% | 14 | 63.6% | 12 | 52.2% | | |
| 5 | 4 | 14.4% | 1 | 4.5% | 3 | 13.0% | | |
| Percentage of improvement | 13% | | 9% | | 14% | | | |

MOS for modified oxford Muscle Grading System, (n) for number of patients, % for percentage.

X² and *p* values for Chi square test for comparing between the three groups.

* for statistical significant at $p \leq 0.05$.

Table 10: Comparison of the pressure manometric assessment in the three groups after the intervention

| Pressure Manometry After intervention | Group I (n = 23) | Group II (n = 22) | Group III (n = 23) | Test of Sig. | <i>p</i> |
|--|---------------------|----------------------|-----------------------|--------------|----------|
| Anal resting pressure (hPa) | | | | | |
| Min.-Max. | 20 - 130 | 20 - 140 | 15 - 150 | H=1.5 | 0.451 |
| Mean ± SD | 72.4 ± 28.3 | 77 ± 33.8 | 88.6 ± 42.5 | | |
| Median | 79 | 73 | 85 | | |
| Anal max. squeezing Pressure (hPa) | | | | | |
| Min.-Max. | 13 - 156 | 9 - 140 | 9 - 90 | H=1.86 | 0.393 |
| Mean ± SD | 65.3 ± 35.4 | 55.1 ± 39.5 | 50.5 ± 21.1 | | |
| Median | 63 | 42.5 | 60 | | |
| Vaginal max. squeezing Pressure (hPa) | | | | | |
| Min.-Max. | 20 - 71 | 5 - 60 | 15 - 90 | H=10.9 | 0.004* |
| Mean ± SD | 43 ± 13.5 | 29.6 ± 14.4 | 34 ± 16.3 | | |
| Median | 42 | 28 | 30 | | |

Min. for minimum, Max. for maximum, (n) for number of patients, (hPa) for Hectopascal.

H and *p* values for Kruskal Wallis test for comparing the three groups.

* for statistical significant at $p \leq 0.05$.

Table 11: Frequencies of occurrence of improvement in the three studied groups after the intervention.

| Improvement | Group I (n = 23) | | Group II (n = 22) | | Group III (n = 23) | | Test of sig. | <i>p</i> |
|-----------------------------|---------------------|-------|----------------------|-------|-----------------------|-------|--------------|----------|
| | (n) | % | (n) | % | (n) | % | | |
| No improvement | 2 | 8.7% | 6 | 27.3% | 3 | 13% | $X^2 = 3.12$ | 0.537 |
| Partial improvement | 12 | 52.2% | 10 | 45.5% | 11 | 47.8% | | |
| Complete improvement | 9 | 39.1% | 6 | 27.2 | 9 | 39.1% | | |

(n) for number of patients, % for percentage.

X^2 and *p* values for Chi square test for comparing between the three groups.

* for statistical significant at $p \leq 0.05$.