**Table 1** Comparison of clinical indicators between the two groups of patients

|  |  |  |  |
| --- | --- | --- | --- |
| Indicators | Control group (n = 35) | Observation group (n = 20) | *P* |
| Gender |  |  | 0.775 |
| Male | 20 (57.14%) | 13 (65.00%) |  |
| Female | 15 (42.86%) | 7 (35.00%) |  |
| Age (year) | 51.0 (49.0,55.0) | 50.0 (49.0,52.3) | 0.390 |
| Weight (kg) | 70.8 (67.3,75.6) | 71.6 (69.8,75.1) | 0.643 |
| Pathogen type |  |  | 0.801 |
| Gram-positive bacteria | 15 (42.86%) | 7 (35.00%) |  |
| Gram-negative bacteria | 16 (45.71%) | 11 (55.00%) |  |
| Fungus | 4 (11.43%) | 2 (10.00%) |  |
| Duration of disease (day) | 10.0 (8.5,12.0) | 11.0 (10.0,12.0) | 0.443 |

**Table 2** Changes in blood gas indicators before and after intervention in two groups of patients

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Groups | PaO2 (mmHg) | | PaCO2 (mmHg) | |
| Before intervention | After intervention | Before intervention | After intervention |
| Control group  (n = 35) | 56.0 (54.0,60.0) | 89.0 (85.5,93.0)\* | 55.0 (52.5,58.0) | 46.0 (44.5,49.0)\* |
| Observation group (n = 20) | 56.5 (55.0,59.0) | 95.0 (93.8,98.3)\* | 55.0 (54.0,58.0) | 41.0 (40.0,43.0)\* |
| *P* | 0.893 | < 0.001 | 0.705 | < 0.001 |
| Groups | SpO2 (%) | | PaO2/FiO2 (mmHg) | |
| Before intervention | After intervention | Before intervention | After intervention |
| Control group  (n = 35) | 88.0 (83.5,92.0) | 92.0 (88.0,96.5)\* | 187.8 (179.6,198.9) | 296.1 (284.9,311.2)\* |
| Observation group (n = 20) | 88.0 (86.0,91.3) | 95.0 (93.8,99.0)\* | 188.6 (184.4,197.2) | 324.7 (318.8,337.0)\* |
| *P* | 0.771 | 0.012 | 0.832 | < 0.001 |

Note: \**P* < 0.05 vs the same group before intervention.

**Table 3** Comparison of the nutritional status two groups of patients before and after intervention

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Groups | PAB (g/L) | | ALB (g/L) | | HGB (g/L) | |
| Before intervention | After intervention | Before intervention | After intervention | Before intervention | After intervention |
| Control group  (n = 35) | 171.3 (164.3,180.8) | 183.4  (176.2,193.2)\* | 32.6  (30.8,35.0) | 35.8 (34.1,38.0)\* | 91.7  (88.4，96.3) | 97.7 (93.8,102.9)\* |
| Observation group  (n = 20) | 171.5 (168.0,178.9) | 203.9  (198.3,215.4)\* | 31.5  (30.7,33.1) | 39.0 (38.0,41.2)\* | 92.6  (90.9,95.9) | 104.8 (102.9,108.7)\* |
| *P* | 0.969 | < 0.001 | 0.242 | < 0.001 | 0.570 | < 0.001 |

Note: \**P* < 0.05 vs the same group before intervention.

**Table 4** Improvement of inflammatory indicators before and after intervention in both groups of patients

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Groups | CRP (mg/L) | | PCT (ng/L) | |
| Before intervention | After intervention | Before intervention | After intervention |
| Control group  (n = 35) | 101.0 (93.8,110.7) | 85.3 (81.0，91.05)\* | 4.8 (4.3,5.6) | 3.3 (3.0,3.9)\* |
| Observation group  (n = 20) | 102.4 (98.8,109.8) | 72.4 (70.7,76.1)\* | 4.7 (4.5,5.2) | 2.5 (2.3,2.7)\* |
| *P* | 0.661 | < 0.001 | 0.512 | < 0.001 |

Note: \**P* < 0.05 vs the same group before intervention.**Table 5** Comparison of the incidence of adverse reactions between the two groups of patients

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Groups | Restlessness | Breathing convulsions | Ventilator-associated lung injury | Vomiting | Bloating and diarrhoea | Gastric retention | Incidence |
| Control group (n = 35) | 3 (8.57%) | 2 (5.71%) | 1 (2.86%) | 4  (11.43%) | 3  (8.57%) | 2  (5.71%) | 15  (42.86%) |
| Observation group  (n = 20) | 1 (5.00%) | 0 (0.00%) | 0 (0.00%) | 1  (5.00%) | 1  (5.00%) | 0  (0.00%) | 3  (15.00%) |
| *P* |  |  |  |  |  |  | 0.041 |