

Table 1. Demographic and Clinical Characteristics of Patients.

Variables	Data
Age, year±SD	73.5±8.0
Sex, n (%)	
Male	35 (%47.9)
Female	38 (%52.1)
Weight, kg±SD	74.3±16.0
Height, cm±SD	162.8±7.5
BMI, kg/m2 ±SD	28.0±6.0
Duration of operation, min±SD	59.3±25.1
ASA, n (%)	
2	27 (%37.0)
3	39 (%53.4)
4	7 (%9.6)
Comorbidity, n (%)	
No	22 (%30.1)
DM	5 (%6.8)
HT	31 (%42.5)
DM+HT	15 (%20.5)
Type of operation, n (%)	
Orthopedics and Traumatology	39 (%53.4)
Urology	15 (%20.5)
General Surgery	14 (%19.2)
Plastic and Reconstructive Surgery	5 (%6.9)
ekspVCI diameter, cm±SD	1.74±0.36
cVCI, n (%)	
<50.0%	42 (%57.5)
≥50.0%	31 (%42.5)

Amount of peroperative fluid, ml±SD	1246.5±409.2
Amount of bleeding, n (%)	
<500 ml	70 (%95.9)
≥500 ml	3 (%4.1)
The need of inotropics, n (%)	
No	58 (%79.5)
Yes	15 (%20.5)

BMI; body mass index, *n*; number, *ASA*; American Society of Anesthesiologists *cm*; centimeters, *kg*; kilogram, *SD*; standard deviation, *VCI*; vena cava inferior, *cVCI*; vena cava inferior collapsibility index, *expVCI*: End expiration vena cava inferior

Table 2. Comparison of Patients with and without Hypotension.

Variables	Patient group without hypotension (n=45)	Patient group with hypotension (n=28)	p values
Age, year±SD	72.4±7.2	75.2±9.0	0.179
Sex, n (%)			
Male	24 (%53.3)	11 (%39.3)	0.243
Female	21 (%46.7)	17 (%60.7)	
Type of operation, n (%)			
Orthopedics and Traumatology	21 (%46.7)	18 (%64.3)	0.583
Urology	12 (%26.7)	3 (%10.7)	
General Surgery	10 (%22.2)	4 (%14.3)	
Plastic and Reconstructive Surgery	2 (%4.4)	3 (%10.7)	
Duration of operation, min±SD	58.6±27.3	60.3±21.5	0.561
ASA, n (%)			
2	21 (%46.7)	6 (%21.4)	0.011
3	22 (%48.9)	17 (%60.7)	
4	2 (%4.4)	5 (%17.9)	

Comorbidity, n (%)			
No	15 (%33.3)	7 (%25.0)	0.677
DM	1 (%2.2)	4 (%14.3)	
HT	17 (%37.8)	14 (%50.0)	
DM+HT	12 (%26.7)	3 (%10.7)	
Weight, kg±SD	76.6±16.0	70.7±15.6	0.301
Height, cm±SD	164.4±7.3	160.2±7.2	0.029
BMI, kg/m2 ±SD	28.4±6.4	27.3±5.3	0.605
ekspVCI diameter, cm±SD	1.84±0.36	1.57±0.29	0.004
cVCI, n (%)			
<50.0%	28 (%62.2)	14 (%50.0)	0.304
≥50.0%	17 (%37.8)	14 (%50.0)	
Amount of peroperative fluid, ml±SD	1277.7±406.6	1196.4±415.8	0.538
Amount of bleeding, n (%)			
<500 ml	42 (%93.3)	28 (%100.0)	0.281
≥500 ml	3 (%6.7)	0 (%0.0)	
The need of inotropics, n (%)			
No	44 (%97.8)	14 (%50.0)	<0.001
Yes	1 (%2.2)	14 (%50.0)	
pH, n (%)			
<7.34	33 (%73.3)	15 (%53.6)	0.006
7.35-7.44	9 (%20.0)	12 (%42.9)	
>7.45	3 (%6.7)	1 (%3.6)	
pCO2, n (%)			
<34	11 (%24.4)	9 (%32.1)	0.576
35-44	29 (%64.4)	16 (%57.1)	
>45	5 (%11.1)	3 (%10.7)	
Lactate, mmol/L±SD	1.44±0.56	1.83±1.11	0.039
BE, mEq/lt ±SD	0.51±2.51	1.44±2.39	0.077

BMI; body mass index, **n**; number, **ASA**; American Society of Anesthesiologists cm; centimeters, **kg**; kilogram, **SD**; standard deviation, **VCI**; vena cava inferior, **BE**; base deficit, **cVCI**, vena cava inferior collapsibility index, **expVCI**; end expiration vena cava inferior

Table 3. Comparison of Patients After Grouping As Small and Large-Vena Cava Inferior According to Threshold Value.

Variables	Small-VCI group (n=45)*	Large-VCI group (n=28)*	p value
Age, year±SD	73.1±8.0	74.0±8.1	0.599
Sex, n (%)			
Male	20 (%44.4)	15 (%53.6)	0.448
Female	25 (%55.6)	13 (%46.4)	
Type of operation, n (%)			
Orthopedics and Traumatology	28 (%62.2)	11 (%39.3)	
Urology	5 (%11.1)	10 (%35.7)	
General Surgery	9 (%20.0)	5 (%17.9)	0.359
Plastic and Reconstructive Surgery	3 (%6.7)	2 (%7.1)	
Duration of operation, min±SD	63.7±22.4	52.1±27.8	0.010
ASA, n (%)			
2	15 (%33.3)	12 (%42.9)	
3	25 (%55.6)	14 (%50.0)	0.373
4	5 (%11.1)	2 (%7.1)	
Comorbidity, n (%)	31 (%68.9)	8 (%28.6)	0.677
Weight, kg±SD	72.7±16.8	77.0±14.6	0.244
Height, cm±SD	161.5±7.4	164.8±7.3	*0.073
BMI, kg/m²±SD	27.8±6.1	28.4±5.8	0.589
cVCI, n (%)			
<50.0%	18 (%40.0)	24 (%85.7)	<0.001
≥50.0%	27 (%60.0)	4 (%14.3)	
Development of hypotension, n (%)	23 (%51.1)	5 (%17.9)	0.004

Time to develop hypotension, min \pmSD	9.1 \pm 5.6	9.0 \pm 4.1	1.000
Bradycardia development, n (%)	11 (%24.4)	3 (%10.7)	0.223
The amount of fluid peroperatively, ml \pm SD	1311.1 \pm 402.9	1142.8\pm404.9	<i>*0.094</i>
The amount of bleeding, n (%)			
<500 ml	43 (%95.6)	27 (%96.4)	1.000
\geq 500 ml	2 (%4.4)	1 (%3.6)	
The need of inotropic, n (%)	13 (%28.9)	2 (%7.1)	0.036

P values in italics indicate values that are close to significance. **BMI; body mass index, **n**; number, **ASA**; American Society of Anesthesiologists **cm**; centimeters, **kg**; kilogram, **SD**; standard deviation, **VCI**; vena cava inferior, **cVCI**; vena cava inferior collapsibility index.*

Table 4. Comparison of Systolic, Diastolic and Mean Blood Pressure Values of Small-Vena Cava Inferior and Large-Vena Cava Inferior Groups.

Variables	Small-VCI group (n=45)	Large-VCI group (n=28)	p value
<i>Systolic BP, mmHg\pmSD</i>			
Preoperative	148.1 \pm 23.4	156.3 \pm 26.0	0.164
0. min	131.7 \pm 29.5	149.4 \pm 28.7	0.015
10.min	120.2 \pm 29.0	136.3 \pm 27.7	0.028
20.min	116.2 \pm 29.7	131.5 \pm 28.4	0.032
30. min	119.2 \pm 26.6	132.9 \pm 24.5	0.037
<i>Diastolic BP, mmHg\pmSD</i>			
Preoperative	79.2 \pm 13.4	90.6 \pm 24.8	0.037
0. min	70.0 \pm 14.4	80.1 \pm 16.5	0.009
10.min	62.8 \pm 14.9	70.7 \pm 17.5	0.022
20. min	63.6 \pm 15.8	71.3 \pm 13.0	0.034
30. min	64.9 \pm 14.3	71.1 \pm 13.2	0.048

Mean BP, mmHg±SD			
Preoperative	102.2±14.8	112.5±22.6	<i>*0.054</i>
0. min	90.6±18.2	103.1±19.2	0.007
10. min	82.0±18.6	92.5±18.8	0.030
20. min	81.1±19.3	91.4±17.3	0.020
30. min	66.4±16.5	67.5±18.5	0.820

** P values in italics indicate values that are close to significance. BP; blood pressure, SD; standard deviation, min; minute.*

Table 5. Multiple Logistic Regression Analysis Performed with Variables Determined to Affect Development of Hypotension in Univariate Analyzes.

Variables	Odds Ratio	95%CI	p values
ASA	2.198	0.802-6.023	0.125
Height	0.941	0.867-1.021	0.145
EkspVCI diameter≤1.8 cm	3.289	0.910-12.500	<i>*0.06</i>
pH	3.201	1.027-9.975	0.04
Lactate	2.628	0.941-7.341	<i>*0.06</i>

*CI; confidence interval, VCI; vena cava inferior, ASA; American Society of Anesthesiologists. * p values in italics indicate values that are close to significance.*

