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Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: 5135-review.doc)

Title: Two surgical procedures for esophagogastric variceal bleeding in patients with portal hypertension

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The manuscript has been improved according to the suggestions of reviewers.

1 Format has been updated.

2 Revision has been made according to the suggestions of the reviewer.

Reviewer #00505500:

(1) My concern is statistical analysis. Although Student's t test was used for continuous variables (page 8, last paragraph), Mann-Whitney's U test is an appropriate approach because clinical continuous variables do not show normal distribution. Therefore, the authors should re-analyze all related continuous variables (haemorrhage, operation time, postoperative abscesses, and postoperative portal pressure, etc) and revise the related sentences.

Answer: As suggested by the reviewer, we used the Mann-Whitney's U test to re-analyze all related continuous variables and revise the related sentences. We refer the reviewer to the "revised tables (Table. 2, Table. 3, Table. 4)" and sentences described " The data were analyzed by SPSS 19.0 statistical software. All results were presented as mean \pm SD. The Mann-Whitney U test and the χ^2 were used appropriately. The Kaplan-Meier method (log rank test) was used to analyze long-term complications appropriately. $P < 0.05$ was considered statistically significant with a 95% confidence interval. This study was exempt from IRB review after institutional IRB review. "

Table.2 Intra&post-operative clinical characteristics

	PCVD group	Combined group	<i>p</i> -value
Intraoperative			
Operative Time(min)	246±71	307±68	<0.01
Blood loss(ml)	936±1627	744±832	<0.01
Blood transfason(ml)	843±1237	760±583	0.010
Postoperative			
Fever	56	10	<0.01
Ascites	941±833	759±695	0.24
Rebleeding	12 (5.80%)	2 (2.41%)	0.04
Long-term complications			
Congestive gastropathy	35 (17.41%)	2 (2.41%)	<0.01
encephalopathy	3 (1.45%)	2 (2.41%)	0.58
Portal vein Thrombosis	16 (7.96%)	3 (3.61%)	0.04
Rebleeding	30 (14.93%)	6 (7.22%)	<0.05

Table.3 Changes of FPP in the two groups (mmHg)

	PCVD group	Combined group	<i>Z</i>	<i>P</i>
Abdomen opening	29.23±4.58	29.81±3.83	-0.36	0.72
Splenectomy	22.32±5.33	24.60±5.01	-2.91	<0.05
PCVD	24.61±5.42	22.06±4.03	-3.08	<0.05
Shunt		21.43±4.35		

Table.4 Comparisons of the hemodynamics in the the two groups pre- and postoperatively

Portal vein (PV)												
	Inner diameter (cm)				Blood flow velocity (cm/s)				Venous flow (ml/min)			
	Pre-	Post-	D-value	P	Pre-	Post-	D-value	P	Pre-	Post-	D-value	P
PCVD	1.42±0.21	1.24±0.26	0.15±0.17	<0.01	15.28±4.69	13.27±4.76	2.01±3.01	<0.01	1327.75±509.81	989.07±475.66	338.00±230.90	<0.01
Combi	1.39±0.26	1.01±0.30	0.38±0.25	<0.01	16.52±4.67	11.33±3.78	5.19±3.42	<0.01	1437.33±451.46	847.57±433.61	589.76±344.56	<0.01
P	0.57	<0.01	<0.01		0.06	<0.05	<0.01		0.10	<0.05	<0.01	
Splenic vein (SV)												
	Inner diameter (cm)				Blood flow velocity (cm/s)				Venous flow (ml/min)			
	Pre-	Post-	D-value	P	Pre-	Post-	D-value	P	Pre-	Post-	D-value	P
PCVD	1.21±0.24	1.05±0.21	0.18±0.13	<0.01	17.65±5.53	14.10±5.58	3.55±0.92	<0.01	1019.59±496.89	640.95±455.09	378.64±152.20	<0.01
Combi	1.25±0.22	0.81±0.22	0.43±0.20	<0.01	18.76±5.76	13.10±5.38	5.65±3.00	<0.01	1083.09±476.80	515.05±341.72	568.05±297.56	<0.01
P	0.25	<0.01	<0.01		0.17	0.21	<0.01		0.37	<0.05	<0.01	
Superior mesenteric vein (SMV)												
	Inner diameter (cm)				Blood flow velocity (cm/s)				Venous flow (ml/min)			
	Pre-	Post-	D-value	P	Pre-	Post-	D-value	P	Pre-	Post-	D-value	P
PCVD	0.95±0.70	0.81±0.21	0.14±0.17	<0.01	13.17±4.61	11.00±4.76	2.13±2.33	<0.01	591.58±357.65	437.30±317.63	154.96±185.30	<0.01
Combi	0.92±0.19	0.66±0.23	0.26±0.27	<0.01	14.69±5.23	10.40±4.46	4.29±3.07	<0.01	642.00±337.22	389.37±268.36	252.63±277.79	<0.01
P	0.30	<0.01	<0.01		<0.05	0.33	<0.01		0.27	0.17	<0.01	

(2) The events of rebleeding, encephalopathy, thrombosis, and death depend on follow-up time; therefore, statistical test of frequency between 2 groups is not sound statistically. The analysis of cumulative incidence using the Kaplan-Meier method (log rank test) is an appropriate approach. The authors should re-analyze the cumulative incidence and survival by the Kaplan-Meier method (log rank test).

Answer: As suggested by the reviewer, we used Kaplan-Meier method to re-analyze the cumulative incidence and revise the related sentences. Moreover, as a result of the small number of deaths in both of two groups, we just analyzed the reasons of the deaths and did not use any statistical method to evaluate the mortality and survival. The revised table was listed in the first opinion and the revised sentence as " As a result of the small number of deaths in both groups, we analyzed the cause of death and did not use statistical methods to evaluate mortality and survival. "

Reviewer #02445571:

(1) There were no parameters and indications for patient selection, inclusive criteria for each group were not clear. Therefore, the results were doubted to be comparable.

Answer: As suggested by the reviewer, the exclusive criteria was described in the "MATERIALS AND METHODS" in revised manuscript, as follows: "(5) patients with Child-Pugh class B or less, and poor condition ", " However, the final decision was often made during surgery."

(2) It was unexplainable why the total haemorrhage was less in the combination group?

Answer: We thank the reviewer for the comment. The reason why the total haemorrhage was less in the combination group was as follows: (1). The clinical behaviors and liver function of the patients who we decide to perform combined operation were better, therefore their less total haemorrhage in the operation was reasonable. (2). We performed the operation carefully and used autologous blood transfusion to control haemorrhage.

(3) The authors failed to analyze the major complication of encephalopathy which may be closely related with shunt postoperatively.

Answer: We thank the reviewer for the comment. The complication of encephalopathy was analyzed in our study: "In our department, we restrict the anastomotic stoma to 6-8 mm. This procedure also reduces the rate of encephalopathy."

Reviewer #02546358:

(1) The author described that the two group are comparable, but it seems not so. PCVD group has more grade B and C patients, and more patient with pre-operative bleeding. Higher incidence of postoperative fever in PCVD group of less operation time also implies that the PCVD group has worse background features.

Answer: We thank the reviewer for the comment. Firstly, The PCVD group has more grade B and C patients and more patients with pre-operative bleeding, we think the main reason was the total cases in the PCVD group was more, because the clinical characteristics we used SPSS to analyze was statistically similar ($P>0.05$). Secondly, the postoperative fever was caused by many reasons, such as hospital-acquired infection, wound infection, inflammatory response and so on. But it did not mean the background features better or worse. The PCVD procedure did not perform shunt, so that the operation time was less than the combined (PCVD + shunt) operation.

(2) There is no explanation why the patients could be arranged comparably into PCVD group and combined group. Exclusive criteria for the combined group "(5) grade B or less" seems to make no sense considering no CHILD C patients in combined group.

Answer: As suggested by the reviewer, the exclusive criteria were described in the revised manuscript, as follows: "(5) patients with Child-Pugh class B or less, and poor condition ", " However, the final decision was often made during surgery."

(3) FPP in combined group is already lower than PCVD group in PCVD step. Also the difference between PCVD and shunt in combined group look not so significant. Further explanation may be needed to prove the effect of shunt.

Answer: We thank the reviewer for the comment. Although the FPP in combined group is already lower than PCVD group in PCVD step, it was still higher than the normal, so we performed combined operation to reduce the FPP to a normal level. Also the main aims to perform shunt in combined group were to reduce the FPP to a normal level, so it may look not so significant between PCVD and shunt steps.

(4) The overall English written was poor.

Answer: We thank the reviewer for the comment. We send this manuscript to Jing-Yun Ma Editorial Office for a copyediting service.

3 References and typesetting were corrected.

4 The language has been edited by Jing-Yun Ma Expert Group for SCI Biomedical Editing

Thank you again for publishing our manuscript in the *World Journal of Gastroenterology*.

Sincerely yours,



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