

(Acute Normovolemic A.N.H

CABG

(C.P.B)

Hemodilution)

CABG

O₂ Saturation PTT PT

Hb

% / :

% /

CABG

CABG

(PT,PTT,INR)

O₂ Saturation

CABG

ICU

A.N.H :

CPB

() *

A.N.H
 CABG
 C.P.B CABG
 (Cardio pulmonary Bypass)
 (Autologous Transfusion)
 A.N.H
 []
 CABG
 Hb
 O₂ saturation PTT PT
 C HIV
 []
 SPSS
 (IHD)
 (Coronary Artery Bypass
 PT CBC Graft) CABG
 INR PTT
 O₂ Saturation ICU
 INR PTT,PT
 () CABG
 FFP Pack Cell

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.()

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>	/	//	/ gr/dl	Hb
>			<	PLT
	>	/	<	PT
-	>			PTT
-	>	/		INR
	>%	% %	<%	O₂ Saturation

% / ()% /
.()

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CABG

										Hb
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()% / ()% /

PTT

()% /

()% /

% /

% /

()

CABG

PTT

								PTT
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		/	/	/	/	/	/	
		/	/	/	/	/	/	

CABG

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PT

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PT

()% /

% /

()% /

()

)% / ()% /

()% / PT (

()% /

()

CABG

PT

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		/	/	/	/	/	/	

% /

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()

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()% /

()

CABG

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		/	/	/	/	/	/	

()% /

()% /

ICU

CABG

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INR

()% /

()% /

()% / INR

()% /

()% /

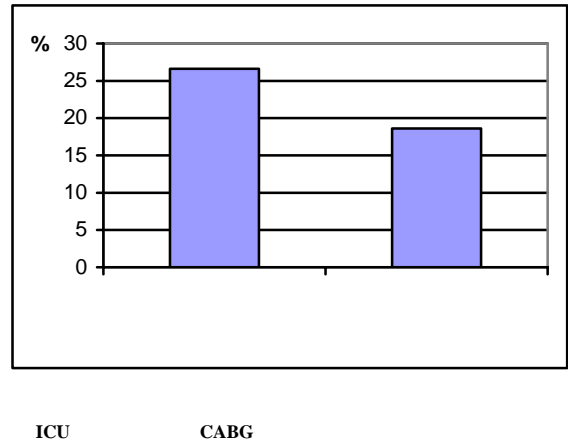
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CABG

INR

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PTT



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ICU []

CABG []

CABG []

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()

CABG

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[] ICU

IHD

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CABG

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IHD

()% /

Oxygen delivery	Oxygen content	()% /
[]	A.N.H	()% /
		PT
		INR
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		()% /
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		(PT,)
		(PTT, INR
		(p< /)
		[]
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CABG		% /
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A.N.H		% /
CABG		(% %)
	CPB	
		[]
		Bold

[]

Chest tube

.[]

) Chest tube

(CABG

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The effect of autologous and heterologous transfusion on homeostasis and hematological parameters in cardiac surgery

Abstract

Introduction: Autologous transfusion is a longstanding concept; and has many advantages, particularly for complex operative procedures, such as cardiac surgery and organ transplantation. A.N.H technique, one of the three types of autologous transfusion was used in patients who were candidates for CABG surgery with cardiopulmonary bypass (CPB).

Materials and Methods: The records of 410 Patients who have been CABG operated in Be'sat and Shahid Chamran hospital in 2002 has been studied in a descriptive observation study. In this research, the patients who showed no symptom of certain disease such as anemia, kidney disease, and severe liver disease, were included. A careful and scientific study of these cases required enough information about their age, sex, cell blood count, PT, PTT, INR, O₂ Saturation and amount of their needed blood products. Lack of enough information regarding any of these factors excluded that patient from our study.

Results: In this research, 410 Patients, mostly male (74.6%) and with the commonest age range of 60-64(19.51) have been studied. The amount of Hb of their blood showed no change before and after CABG operation in autologous and heterologous group but the amount of platelet was more in the latter.

After the operation, there was no difference on the amount of O₂ Saturation and homeostasis parameters before and after CABG in both heterologous and autologous transfusion. But the need for blood products was more in heterologous group during the operation and ICU care period.

Conclusion: A.N.H decreases the amount of homologous blood use. Therefore this technique is recommended in all patients with adequate Hb concentration who are candidates for cardiac surgery with CPB.

Keywords: CABG, Autologous and Heterologous transfusion Homeostasis, Hematological Parameters

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