Preoperative Aminoacids in **Obstetrics: Blood Loss** Multimodal

Prevention, during C-

Section: A Prospective

Observational Study

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BACKGROUND:

- **Perioperative fluid therapy**, better if with colloids, to prevent:
 - hypothension during surgery;
- Aa to prevent shivering and temperature reduction.
 - > In Orthopaedics amino acids were effective, moreover to reduce perioperative blood loss.

MATERIALS AND METHODS:

- 113 patients recruited
 - Undergoing elective or urgent C-section.
 - Receiving before CSEA either:
 - 1. Hetastarch-Volulyte® 1L + Isopuramin® 7% 1L, or
 - 2. Hetastarch -Volulyte® 1L + Ringer Acetate® 1L.

RESULTS:

- Firstly in Obstetrics, preoperative amino acids have been used during CSE in CS:
- Blood loss reduction;
- Perioperative **Hb and Ht variation** reduction:
- > Erytrocites transfusions saving.



Effectiveness of preoperative

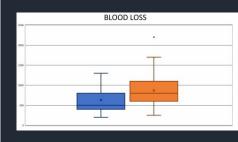
Aminoacids in Obstetrics to reduce

blood loss.



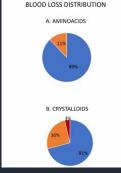
Rationale:

- 1°C temperature increasing coagulation activity;
- light hemodilution saving



BLOOD LOSS

Blue box plot = Aminoacids, Orange box plot =Crystalloids



BLOOD LOSS DISTRIBUTION

A: AMINOACIDS: Blue slice = ≤ 1000 ml. Orange slice = 1000-1500 ml B: CRYSTALLOIDS: Blue slice = ≤ 1000 ml, Orange slice = 1000-1500 ml, Red slice = >

ISOPURAMIN®	RINGER®
Δpre-postop Hb=-0,56±0,81	Δ pre-postop Hb = -1,23±0,90
T TEST P value <0,01	T TEST P value <0,01

Perioperative Hb variation





Take a picture to download the abstract on page 315.

	CHARACTERISTICS	ISOFORAIVIIIV	KINGER A
	PATIENTS	58	55
	WEIGHT	77±8 Kg	78±8 Kg
	AGE	36±6 years	35±6 years
	PARITY	1001 _a	1001 _a
	PRETERM DELIVERY	3/58 _b	3/55 _b
e	MULTIPLE GESTATION	2/58 _b	3/55 _b
_	PREVIOUS PPH _c	4/58 _b	1/55 _b
	PLACENTAR	6/58 _b	1/55 _b
_	ABNORMALITIES		
	COAGULATIVE	3/58 _b	1/55 _b
	IMPAIRMENTS		
	LEIOMIOMA	8/58 _b	6/55 _b
	UTERINE ATONY	1/58 _b	0/55 _b
	MILD PREECLAMPSIA	4/58 _b	4/55 _b
4	FAILURE OF DELIVERY INDUCTION	5/58 _b	4/55 _b
	MAP _d	3/582	1/55 _b
	SPONTANEOUS MISCARRIAGE	17/58 _b	8/55 _b
	MALPRESENTATION	9/58 _b	11/55 _b
	FETOPELVIC SPROPORTION	5/58 _b	2/55 _b
	PREVIOUS CT OR UTERINE SURGERY	43/58 _b	37/55 _b

0000 = 0 Term deliveries, 0 Preterm deliveries, 0 Miscarriages, 0 Alive

Numerator = number of cases with specific characteristics, Denominator = numerousness of each studied group.

PPH = Post Partum Hemorrhage

AWAP = Medically Assisted Procreation		
MEDICATIONS	CASES	
OXYTOCIC >15 UI	4/113 _a	
TRANEXAMIC ACID	11/113 _a TXA	
(TXA), COAGULATIVE	1/113 _a	
FACTORS + PC AND PS _b	TXA+FIBRINOGEN+COAGUL	
(CONFIDEX®),	ATIVE FACTORS	
FIBRINOGEN		
(HAEMOCOMPLETTAN®)		
TRANSFUSIONS	1/113 _a (ONLY 1 BAG OF	

TAB III. USE OF BLOOD PRODUCTS OR REPLACEMENT THERAPY Numerator= number of cases with specific characteristics. Denominator= total numerousness.

PC= Protein C; PS= Protein S. EC= Erytrocites.