



Dr. Aditi Khandelwal, New Updates in Transfusion

Торіс	Summary	References
Pooled pathogen	Pathogen reduced platelets (PPPT) available in Ontario	Blais-Normandin I, Tordon B,
reduced buffy	PPPT effectively reduces transfusion transmitted infections –	Anani W. Pathogen-reduced
coat platelets	viruses, bacteria, T cells, protozoa parasites	buffy coat platelets [Internet]. Ottawa: CanadianBlood
(PPPT)	Psoralen treatment (INTERCEPT technology) is being used	Services; 2022 [cited 2022 05
	Instead of 4 for pooled platelets, 7 buffy coats are being	10]. Available from:
	pooled for PPPT then treated	https://profedu.blood.ca/en/tran
	Shelf-life is 5 days	sfusion/publications/pathogen-
	Less donor plasma is present in each bag	reduced-buffy-coat-platelets
	No viable lymphocytes, hence no irradiation required	
	Considered CMV negative	
	Fewer allergic and febrile reactions	
	Main concern – non-immune platelet refractoriness in	
	chronically transfused populations	
Tranexamic Acid	NEJM 2022	Devereaux PJ et al. Tranexamic
(TXA) Updates – Is	P: N=9535 undergoing non-cardiac surgery	acid in patients undergoing
there an increase	I: TXA 1g bolus	noncardiac surgery. NEJM
in CV/VTE risk?	C: placebo	2022 Apr 2. doi:
	O: TXA is superior to placebo in reducing bleeding (HR 0.76).	10.1056/NEJMoa2201171.
	Non-inferiority for CV/VTE safety outcomes was not	Online ahead of print.
	established (TXA group 14.2% vs. Placebo 13.9%)	
		Taeber I et al. Association of
	JAMA Surg 2021	intravenous tranxamic acid
	Syst review and meta-analysis with N=125550 surgical pts	with thromboembolic events
	IV TXA vs. Placebo/no treatment	and mortality. JAMA Surg.
	No increase in TE events	2021;156(6)e210884
Wrong blood in	ABO mistransfusions can occur due to WBIT	Dunbar NM et al. Factors
tube errors	WBIT is detected ~ 1 in 10,000 samples	associated with wrong blood in
(WBIT)	WBIT are either:	tube errors: An international
	 Intended patient + wrong label (~50%) 	case series – The BEST
	 Wrong patient + intended label (~50%) 	collaborative study.
	WBIT occur more frequently in EDs > inpatient wards >	Transfusion 2022;62:44-50.
	outpatient wards	
	Most commonly, WBIT is identified during pre-transfusion	Dunbar NM et al. Emergency
	testing (58%) and check sample (20%)	departments are higher risk
	Most common source of error is availability of another	locations for wrong blood in
	patient's labels or tubes when phlebotomy is being	tube errors. Transfusion
	performed	2021;61:2601-2610.
	Electronic positive patient identification has not eliminated WBIT	
	WBIT is preventable if all protocols/policies are followed	

TRANSFUSION CAMP RESOURCES ARE DEVELOPED BY TRANSFUSION CAMP FACULTY FOR EDUCATIONAL PURPOSES ONLY. THE RESOURCES <u>MUST NOT BE USED OR DISTRIBUTED OUTSIDE OF TRANSFUSION CAMP</u> WITHOUT THE CONSENT OF THE TRANSFUSION CAMP ORGANIZERS. THE MATERIALS ARE NOT INTENDED TO BE A SUBSTITUTE FOR THE ADVICE OF A PHYSICIAN AND SHOULD BE ASSESSED IN THE CONTEXT OF THE APPLICABLE MEDICAL, LEGAL AND ETHICAL REQUIREMENTS IN ANY INDIVIDUAL CASE. PROVIDE FEEDBACK ON TRANSFUSION CAMP RESOURCES OR ENQUIRE ABOUT TRANSFUSION CAMP BY CONTACTING TRANSFUSIONCAMP@BLOOD.CA.