IAKH

Critical incident report from the IAKH-Fehlerregister

in cooperation with the DIVI and the CIRSmedical Anästhesiologie of BDA/DGAI and ÄZQ

Report via ☒ **IAKH Fehlerregister** ☐ **CIRSmedical AINS of BDA/DGAI and ÄZQ**

Topic/Title	**Administration of a platelet unit in a rapid infusion device**
Case -ID	**19-2010-l9u8**
Case report (approx. as entered)	Massive transfusion in OR: a team of anaesthesia nurses was busy to hang und administer the blood units following check and approval by the responsible anaesthesist. PRC and FFP were given by a LEVEL-1 – system and another anaesthetist was caring about the anaesthesia, vasopressor therapy and volume monitoring. Inmidst multiple blood products, a platelet unit was given to an experienced anaesthesia nurse, put into the pressure infusion system and started. The supervising anaesthesist entered the room and stopped immediately the platelet infusion. If patient was experiencing a relevant blood pressure drop was not detectable. Rest of platelets was given over a large bore peripheral venous access with gravity drive.
Problems (here: questions that arise the possibility of problems- there had been no possibility for follow up queeries)	• **Pressure cuff for the infusion of platelet concentrates might activate stored allogeneic platelets. Currently it is not known, if in that clinical bleeding situation the liberation of cytokines and procoagulants is harmful or deleterious. It is even possible that the activation of platelets by pressure cuff together with the rapid infusion improves coagulation better than the "correct" application.** • **Supervisor not present constantly in massive transfusion situation**
Process Step concerned **	**5-administration**
Circumstances	**Emergency, week ends, ASA 4, experienced team and doctor in education, supervisor not present**
Good elements ("as reported" or criticism of the CIRS Board	**Team formation in the OR**
***Risk of reccurrence/Likleyhood**	**3 of 5**
***Potential risk for patient damage**	**1 of 5 or ?**
Board recommendation (Suggestion of a change of process and/or structural quality by introduction	**Process quality:** • **SOP Storage and Handling , Administration of blood units**

/installation/reeducation of the following measures) SOP= Standard operating procedure	• Education/ Lecture about storage alteration of blood products • Report to the board of transfusion in that hospital Struktural quality: • Label on platelets : „AGITATE GENTLE! DO BOT COOL! NO PRESSURE ON BAG“ • Label on Pressure infusion device: „Only for PRC and FFP” • Increase platelet bag in size- fits no longer in most rapid infusion devices

*Risk Grades:

Frequency, Risk of reoccurrence		Potential risk for patient damage	
1/5	very rare max 1/100 000	1/5	very little acute injury/no permanent damage
2/5	rare max. 1/10 000	2/5	minor acute injury/slight permanent damage
3/5	medium max. 1/1000	3/5	considerable acute injury/ minor permanent damage
4/5	frequent, min. 1/100 damage	4/5	profound acute injury / considerable permanent
5/5	usual/common, min. 1/10	5/5	death/severe permanent damage

****Allocation of errors/near misses in the process of administration of blood or coagulation products**

1. -blood sample withdrawal
2. -blood order
3. -laboratory
4. -handling or storage
5. -blood product release, transportation, or administration
6. -sample/product/patient identification