THE WAA-APHERESIS REGISTRY REPORT – AN UPDATE UNTIL 2024.

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1. Sweden 2. Australia; 3. Austria; 4. Belgium; 5. Croatia; 6. Czech Republic; 7. Germany; 8. Lithuania; 9. The Netherlands; 10. Norway; 11. South Africa; 12. Suriname; 13. Turkey.

Background and aim

Therapeutic Apheresis is a group of more than 30 different procedures. Treatment is mainly performed in patients with severe diseases that respond less to conventional therapy alone [1,2].

To learn more about effects and side effects of these various procedures quality assessment registries have been established. One such registry is the World Apheresis Association registry (www.WAA-registry.org) that enables centers from the whole world to participate in registering their experience. During the latest 5 years more than 25 centers have participated in data collection and analyses. The aim of repeated analyses and reports are to evaluate safety and trends of various variables. The aim of this study is to report of data within the WAA-registry from 2004 up to and including 2023.

Material

The joint venture has through the years resulted in data collected of 25 000 patients and more than 160 000 procedures. Safety analyses in relation to procedures , diagnoses and other variables will be reported.

Results

The mean age of 50 years has been stable over the years. Women represent approximately 40% of those treated. Over the years a significant reduction in side effects have been noted. This trend has levelled off during the latest years and eventually there is an increased risk to come. Variables that cause side effects differ such as ICD-10 code diagnoses with M display more moderate AEs than other groups ($p<0.001$) while those with G have more mild AEs than other groups; G versus M has more hypotension ($p<0.001$). Variations exists in replacement fluid. The risk that apheresis causes severe side effects overall is 13/10 000 procedures in 2023.

Discussion & Conclusion

Repeated analyses of quality assessment data may guide safety and efficacy. Changes in adverse events over time help guide risks and benefits with new techniques, diagnoses and procedures.

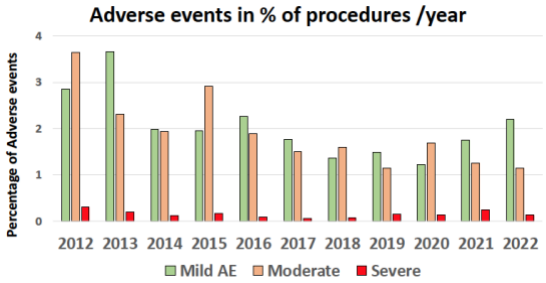

Figure 1: ***Numbers and rating of reported adverse events.*** *Distribution in percentage of adverse events present during apheresis procedures performed through the years 2012–2022 graded as Mild, Moderate and Severe.*

Symptoms	Mild AE% (n=310)	Moderate AE% (n=729)	Severe AE% (n=63)
Urticaria, conjunctivitis	2	8	25
Hypotension	13	5	24
Tingling, pricking	39	74	11
Late complications, Other	2	1	5
Angina pectoris			3
Hypertension	2	0.5	3
Asystole/Cardiac arrest/			3
Back pain related to apheresis	2	0.7	3
Nausea and/or vomiting	10	4	3
Convulsions, not specified as epilepsy	0.6	0.4	3
Bronchospasm	0.3	0.3	3
Arrhythmia	3		1
Abdominal pain	2	1	1
Vertigo	4	0.1	1

Table 1: Adverse event frequency in 54,164 apheresis procedures in the time frame 2018-2022. Technical and vascular access problems were excluded here..

References

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2. Witt V, Stegmayr B (2024) The WAA-registry. Transfus Apher Sci 10.1016/j.transci.2024.103889: 103889. doi:10.1016/j.transci.2024.103889..

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