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722.ALLOGENEIC TRANSPLANTATION: ACUTE AND CHRONIC GVHD, IMMUNE RECONSTITUTION

Patterns of Graft-Versus-Host Disease (GvHD) Prevention and Management in the Eastern Mediterranean (EM) Region: A Worldwide Network for Blood & Marrow Transplantation (WBMT) Survey

Ibrahim Muhsen, MD[1], Dietger Niederwieser, MD PhD[2], Laurent Garderet, MD PhD[3], Olaf Penack, MD[4], Hildegard T. Greinix, MD[5], Nour Ben Abdeljelil, MD[6], Ibraheem Abosoudah, MD[7], Sameer Alamoudi, MD[8], Amal Albeihany, MD[9], Saad Ahmed Al Daama, MD[10], Mohammad Hamad Alshahrani, MD[11], Salem Alshemmari[12], Murtadha Al-Khabori, MD[13], Ahlam Almasari, MD[14], Abdulhakim Al Rawas, MD[15], Medhat Askar, MD PhD[16], Ali Bazarbachi, MD PhD[17], Mohammed-Amine Bekadja, MDPhD[18], Malek Benakli, MD[19], Munira Borhany, MD[20], Maria El kababri, MD[21], Khaled Halahleh Sr., MD[22], Amir Ali Hamidieh, MD[23], Mahmoud Hammad, MD[24], Ahmad Ibrahim, MD[25], Solaf Kanfar, MD[26], Mohamed Hamed Khalaf, MD[27], Mohammed Marei, MD[28], Muhammad Ayaz Mir, MD[29], Dania Monagel, MD[30], Asma Quessar, MD[31], Rawad Rihani, MD MSc[32], Munira Shabbir-Moosajee, MD[33], Marwan Shaheen, MD[34], Almetwaly Mohamed Sultan, MD[35], Mohammad Vaezi, MD[36], Mickey Boon Chai Koh, MD PhD[37], Zina Peric, MD PhD[38], Yoshiko Atsuta, MD PhD[39,40], Mahmoud Aljurf, MD[41]

[1] Baylor College of Medicine, Houston, TX
[2] University Hospital Leipzig, Leipzig, DEU
[3] Hopital Saint Antoine, Paris, FRA
[4] Department of Hematology, Oncology, and Cancer Immunology, Charité Universitätsmedizin Berlin, Campus Virchow Klinik, Berlin, Germany
[5] Division of Hematology, Department of Internal Medicine, Medical University of Graz, Graz, Austria
[6] Centre National de Greffe de Moelle Osseuse, Tunis, Tunisia
[7] King Faisal Specialist Hospital and Research Center-Jeddah, Jeddah, Saudi Arabia
[8] Department of Adult Hematology and Stem Cell Transplantation, Princess Noorah Oncology Center, Ministry of the National Guard Health Affairs, Jeddah, Saudi Arabia College of Medicine, King Saud Bin Abdulaziz University for Health Sciences, Saudi Arabia, Jeddah, Saudi Arabia
[9] King Faisal Specialist Hospital & Research Centre - Madinah, Madinah, Saudi Arabia
[10] KFSHD, Dammam, SAU
[11] Prince sultan Military Medical City, Riyadh, SAU
[12] Kuwait Cancer Center, Kuwait, Kuwait
[13] Hematology -BMT, Sultan Qaboos University, Muscat, ARE
[14] King Faisal Specialist Hospital and Research Center - Jeddah, Jeddah, Saudi Arabia
[15] Sultan Qaboos University Hospital, Muscat, Oman
[16] Health and Immunology Department, Qatar University College of Medicine, Doha, Qatar
[17] American University of Beirut Dept. of Medicine, Beirut, Lebanon
[18] Hematology and Cell Therapy, EHU 1st Novembre 1954 Bir el Djir Usto, Oran, Algeria
[19] Pierre and Marie Curie Center, Algiers, Algeria
[20] National Institute of Blood Disease & BMT, Karachi, PAK
[21] Pediatric hematology and oncology center of Rabat, Mohamed V University, Rabat, Morocco
[22] King Hussein Cancer Centre Adult BMT Program, AMMAN, Jordan
[23] Pediatric Cell and Gene Therapy Research Center, Gene, Cell & Tissue Research Institute, Tehran University of Medical Sciences, Tehran, Iran (Islamic Republic of)
[24] Children's Cancer Hospital Egypt, Cairo, Egypt
[25] Makassed Hospital and Middle East Institute of Health, Beirut, Lebanon
[26] King Fahad Specialist Hospital Dammam, Riyadh, SAU
[27] Maadi Armed Forces Medical Compound, Cairo, EGY
[28] King Fahad Medical Center, Riyadh, SAU
[29] Shifa International Hospital, Islamabad, Pakistan

[30] National Guard Hospital, Jeddah, Saudi Arabia
[31] Hôpital Universitaire Cheikh Zaid, Rabat, Morocco
[32] Pediatric Blood and Marrow and Cellular Therapy Program, King Hussein Cancer Center, Amman, Jordan
[33] Aga Khan Univeresity Hospital, Karachi, PAK
[34] King Faisal Specialist Hospital, Riyadh, Saudi Arabia
[35] Nasser Institute for Research and Tretment, Cairo, Egypt
[36] Research Institute for Oncology, Hematology and Cell Therapy, Tehran, Iran (Islamic Republic of)
[37] St George's University Hospitals, London, United Kingdom
[38] School of Medicine, University Hospital Centre Zagreb, University of Zagreb, Zagreb, Croatia
[39] Department of Registry Science for Transplant and Cellular Therapy, Aichi Medical University School of Medicine, Nagakute, Japan
[40] Japanese Data Center For Hematopoietic Cell Transplantation, Nagakute, Japan
[41] Dept of Hematology, Stem Cell Transplantation and Cellular Therapy, KFSHRC, Riyadh, Saudi Arabia

Introduction:
GvHD is a significant cause of morbidity and mortality in recipients of allogeneic hematopoietic cell transplant (HCT). The prevention, management, and treatment of GvHD vary in different regions worldwide. This WBMT study aims to better understand the current clinical practices of GvHD prevention and management around the globe. This study presents our survey results in the Eastern Mediterranean Region.

Methodology:
This is a cross-sectional survey-based study involving hematopoietic cell transplant (HCT) centers in the EM region. Participants of the survey were programs' directors or their designees. The survey comprised two parts; the first part aimed to study the practices of GvHD prevention, whereas the second part aimed to study GvHD management and treatment. The survey was distributed and filled out between December 2022 and May 2023.

Results:
Thirty participants from 28 institutions responded. Participants were from eleven different countries in the EM region. Fourteen participants (50%) filled it for combined pediatrics and adult HCT programs. The remaining participants filled it for programs performing HCT, either only in adult (27%) or pediatrics (23%) patients.
The majority of participants indicated that cyclosporine and methotrexate combination is the most used GvHD prophylaxis therapy in both myeloablative and reduced intensity HCT in their centers. Cyclosporine was the predominantly used calcineurin inhibitor (CNI), followed by tacrolimus. All centers using cyclosporine indicated that they monitor its level, with 200-300 mcg/L being the target in 66% of the survey. Cyclosporine was typically given for 2-12 months after HCT, with around 80% of centers stopping it at 3-4 months post-HCT in recipients with malignant indications and around 90% of centers stopping it around 6-12 months post-HCT in recipients with non-malignant indications. When tacrolimus is used, results showed that it is typically used for similar duration to cyclosporine. Twenty-nine participants reported using post-transplant cyclophosphamide (PTCy) in their centers, with seven centers (24%) reporting its use in indications other than haploidentical transplants. Additionally, the results show that PTCy is typically used in combination with other medications, with 53% of participants reporting that it is used along with mycophenolate mofetil and cyclosporine and only one participant reported its use as a single agent. Seven participants (23%) reported that PTCy is typically used in doses less than 50 mg/kg.
In patients with established GvHD, steroids were most commonly used alone as a first-line therapy in acute and chronic GvHD. The majority of centers report re-introducing or continuing the immunosuppressive agent used in GvHD prevention, with few centers indicating that they switched to another CNI. 64% and 55% of centers indicated that they have a standard-operating procedure (SOP) for steroid-refractory acute GvHD (aGvHD) and chronic GvHD (cGvHD), respectively. Only two centers reported involving steroid-refractory GvHD patients in clinical trials. Second-line therapy for steroid-refractory aGvHD and cGvHD varies significantly between centers depending on the type of GvHD and organ involved. In steroid-refractory aGvHD, ruxolitinib was the most frequently listed agent to be considered in the second line, regardless of the involved organ. Ruxolitinib was followed by Extracorporeal photopheresis in Skin aGvHD, Budesonide in lower GI tract aGVHD, and Mycophenolate Mofetil in liver aGvHD. In cGvHD, ruxolitinib was also the most frequently listed medication. However, more significant variability between centers was noted in treating organ-specific cGvHD.

Conclusion:
GvHD prevention and management practices vary between the different EM region centers. Some variations could be related to access to some medications. This might indicate the need for more evidence-based practices in preventing and managing GvHD and possibly adjusting the guidelines according to access and availability of some medications. WBMT is currently working on understanding the global patterns of GvHD practices in other regions and, ultimately, a global comparative study of all data combined.

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