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CHALLENGES AND REALITIES OF HEMATOPOIETIC CELL TRANSPLANTATION OF MYELODYSPLASTIC SYNDROMES PATIENTS IN LATIN AMERICA: A SURVEY.

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BACKGROUND

Hematopoietic Cell Transplantation (HCT) is the only curative therapy available for Myelodysplastic Syndromes (MDS) patients[1]. In Latin America (LA), although there is a specific registry of transplants in MDS, there is no information on the percentage of patients who are referred to HCT centres, those who indeed underwent the procedure or not[1]. The general scenario of LA comprises a higher rate of autologous HCT (60%)[2]. In 2018, 127 teams from 14 countries reported activity data into the 2018 WBMT GTA. From all 5642 transplants performed in this period, only 170 (9%) involved MDS/MNP, showing the difficulty to transplant this group of patients. The study aimed to understand the journey of MDS patients referred to HCT centers of LA and key points in this process.

METHODS

A questionnaire was directed to members of the Latin American Registry for Myelodysplastic Syndrome through Google Forms, from 2 to 13 May 2022.

RESULTS

A total of 18 physicians that represent 28 centers of adult and pediatrics HCT answered the questionnaire regarding pre and post HCT features. In most centers, less than 5 patients were attended in the last 2 years and less than 30% used geriatric scores in the HCT decision. Transfusion dependence was reported by 89.2% of the centers, and alloimmunization in 22.3%. Data from 162 patients were entered. There was a predominance of high-risk R-IPSS stratification. About 25% of patients were referred for transplantation without an R-IPSS score. Contraindication rate was 14.2% (n=23), with comorbidities and disease refractoriness being the main causes.

Table 1: Main Responses of the Survey

Data	%
Questions about the centers (n=18)	
Number of patients attended at pre-HSCT service in the last 24 months.	
Less than 5	38,9% (7)
Between 5 and 10	27,8% (5)
Between 11 and 20	22,3% (4)
More than 20	11,1% (2)
Use of any geriatric scores for HSCT decision	
Yes	27,8% (5)
No	72,2%(13)
Alloimunization	22,3% (4)
Transfusion Dependence	89,2% (14)
Patient's features (n=162)	
Age (years)	
2-18	5.60% (9)
10-18	9.60% (15)
19-30	7.60% (12)
31-50	24.40%(40)
51-70	45.60% (74)
71-80	7.20% (12)
Karyotype	
Yes	83.3%
No	16.7%
IPSS-R stratification	
Very Low/Low	13.40% (15)
Intermediate	26%(31)
High/Very high	61% (73)
Without Stratification	26.50% (43)
Indication to HSCT	
Indicated	85.80% (139)
Contraindicated	14.20% (23)
Patients indicated but that could not be transplanted	16.5% (23)
Causes	
Absence of compatible donor only	30.4%
Disease Progression only	69.6%
Worsen for any reason	30.4%
Lack of beds	43.5%
Refuse of patient	30.4%
More than one reason	39.1%
Comorbidities	
Yes	50%
No	50%
Types of Comorbidities	
Cardiac	45.4%
Pulmonary	36.3%
Hepatic	100%
Infectious	54.5%
Renal	27.3%

CONCLUSION

The results obtained from this survey bring relevant findings, which raise many questions about the referral of MDS patients to HCT, including the small number of adult and pediatric patients admitted for pre-HCT evaluation. Unfortunately, there is no comprehensive epidemiological data regarding the incidence of MDS in Latin America. It is known that MDS is a disease of older patients, increasing its incidence after the age of 60, but we have reports that, due to exposure to genotoxic agents, cases are not uncommon in younger people and even children in our region. In Brazil, 4383 deaths from MDS were reported in the period from 2014 to 2018, based on the DATA SUS. Despite this data, we can only question whether we have really assessed the adequate number of patients before HSCT, as 38.9% of the centers have assessed less than 5 patients in two years. Even allo HCT is increasing in LA, it is still a small number in comparison to the US and Europe. For example, 30 in LA, 227 in USA/Canada and 181 in Europe in 2016. Since not all centers responded to the survey, the study presents some limitations in capturing the real-world picture. Nevertheless, data obtained is a starting point for understanding the reality of the HSCT in LA and to make decisions aiming to overcome the barriers and promote access to the procedure with quality and safety.

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