







# NURSING ROLE IN THE HEMATOPOIETIC STEM CELL AND BONE MARROW TRANSPLANTATION UNIT IN RABAT, MOROCCO

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### **INTRODUCTION**

Cell therapy is an important step in the cure of certain hematological, immunological, oncological or genetic diseases in children. Autograft and allograft are the two types of transplant in pediatric hematology/oncology unit (SHOP) in our hospital in Rabat. Stem cell and bone marrow transplantation generates multiple complications for the child during the course of transplantation.



## **OBJECTIVE**

Increase number of allografts to 10 in 2022, and elucidate the nursing role for success. This information can also serve as a training tool for nurses in the pediatric hemato-oncology department SHOP Rabat.

# **METHOD**

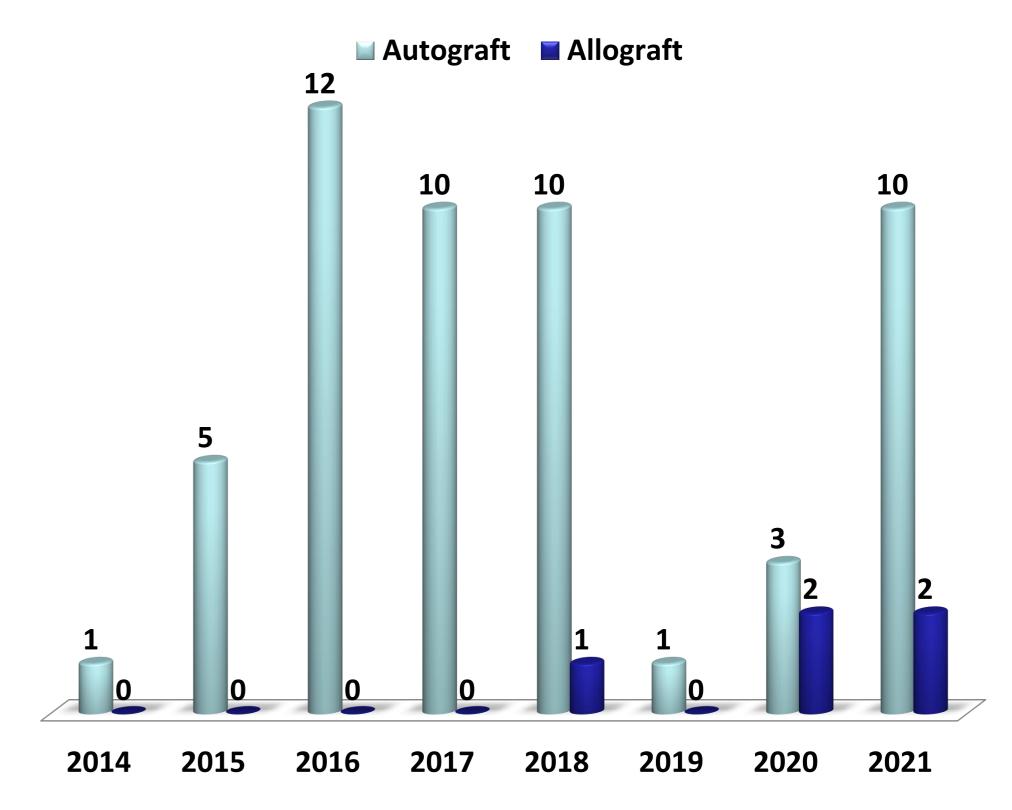
Data collection performed by participatory observation during my nursing work in transplant from October 2020 until March 2022, 24-hour shift, and review of transplant files and statistics of the transplant unit.

#### RESULTS

Over 18 months, 17 autografts and 5 allografts were completed. Nursing role by transplant phase presented here. Pretransplant: perform complete patient biological assessments, HLA typing for the donor and recipient for allograft, mobilization of stem cells for autograft. Transplant hospitalization: welcome and educate the child and caregiver on hygiene and transplant procedures. Administer myelo-ablative and non myelo-ablative conditioning treatment. Reinject of stem cells or bone marrow. Immediately post-transplant: prevent/treat complications of aplasia and early toxicity of conditioning. Recovery from aplasia: prevent graph versus host disease in allograft patients. Exit from hospitalization: prepare child for discharge and educate child/family for home therapeutic care: diet, hygiene, leisure, and school activities.



MONTH NURSES ACTS	Jan	Fev	Mars	Avr	Mai	Juin	Juil	Aout	Sept	Oct	Nov	Dec	Total
Blood test	59	377	68	447	243	201	244	45	0	0	306	252	2242
Chemotherapy	63	79	96	331	290	254	367	39	0	0	338	282	2139
Antibiotics	123	1123	210	666	802	748	833	95	0	0	759	531	5890
Steroids	68	38	0	67	0	0	0	0	0	0	88	28	289
Morphine administration	62	79	24	17	26	31	29	2	0	0	23	18	311
Antivomiting treatment	64	227	53	81	141	120	182	16	0	0	164	138	1186
Albumine	78	4	31	0	15	16	31	3	0	0	9	0	187
Venous access	62	84	63	85	46	102	65	5	0	0	302	396	1210
Fluid administration	79	1225	77	627	806	713	849	93	0	0	55	35	4559
Paracétamol	69	126	28	121	70	59	49	10	0	0	5	5	542
Oxygenotherapy	13	2	11	0	0	2	11	3	0	0	57	54	153
Dressing	55	102	30	225	28	42	26	3	0	0	27	20	558
Enteral Nutrition	42	56	46	82	22	43	41	3	0	0	17	4	356
Parenteral Nutrition	0	26	24	0	7	0	0	3	0	0	12	8	80
Cytapheresis	1	2	0	3	2	2	2	0	0	1	2	1	16





ACTIVITIES OF THE NURSES IN THE TRANSPLANT UNIT DURING THE YEAR 2021

## CONCLUSION

The nursing role in the pediatric transplant unit is important to prevent and treat transplant complications and to succeed in our department's project of achieving 10 successful allografts per year. Sharing this knowledge will enable nurses working in settings in other limited resource settings to understand the nursing role and scope of practice in a lower-middle-income country transplant unit to ensure a good outcome for the child and family.