

Introduction

While intensive chemotherapy and allogeneic hematopoietic transplant are still a standard of care needed for aggressive hematologic malignancies, it requires prolonged hospitalization in a protected area with restrictive measures on daily basis.

Both social interaction and body care are heavily compromised with limitation of visits and personal effects, specific nutrition, intense fatigue, alopecia, digestive disorders ...

In addition, the announcement of the disease and the uncertainty of potential complications in a life-threatening disease led to a very comprehensible anxiety.

Various supportive cares have been implemented to improve patient well-being. This randomized prospective study aims to evaluate the impact of aesthetic care on quality of life and anxiety of patient hospitalized for acute leukemia induction therapy or allogeneic transplant.

Methodology

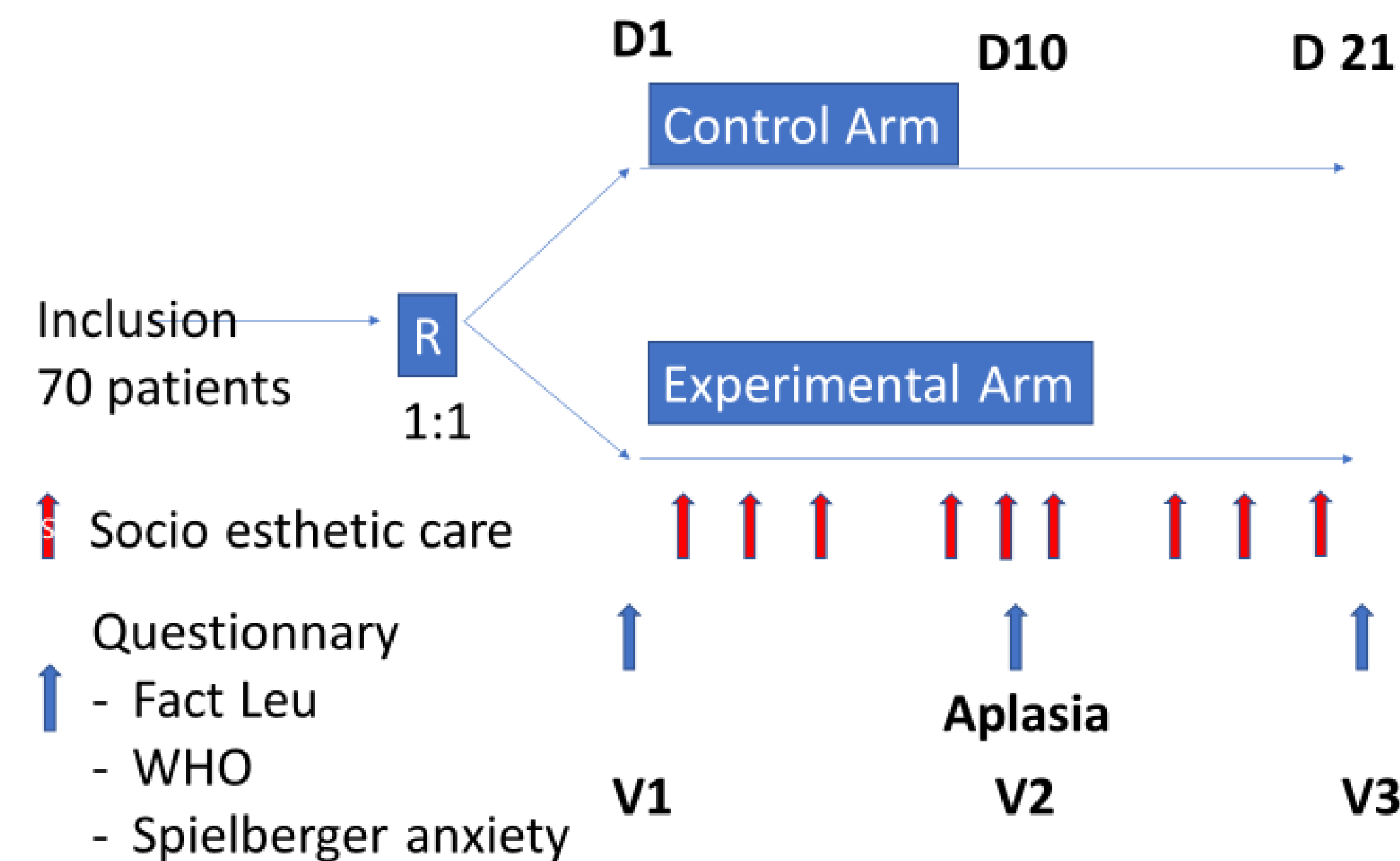
Seventy patients were randomized in two groups with one receiving 3 aesthetic sessions for 3 weeks.

Both groups could benefit from other supportive care such as psychologist, art therapy or sport coaching session. Spielberger anxiety test, quality of life (Fact-leu) and WHO-5 were evaluated upon arrival, in deep aplasia and end of hospitalization.

Number of external visits, use of anxiolytic, hypnotic and analgesics treatments were also analyzed.

The primary end point was the change in the Spielberger anxiety test in deep aplasia compared to the one upon admission. Secondary end point included change in the Spielberger at the end, change in the FAC-Leukemia score and OMS score in deep aplasia or at the end compared to the score upon arrival.

All statistical analysis were done independently by the statistics department of Lille university Hospital (SEED), using non parametric covariance analysis. Sensibility analysis was done additionally for the primary end point, using hypnotic drug as covariable.



	TOTAL	Control	Aesthetic care
Number patients	62	32	30
Women	36 (57,1%)	20 (60,6%)	16 (53,3%)
Men	27 (42,8%)	13 (39,3%)	14 (46,7%)
Allograft	30 (48,3%)	15 (46,9%)	15 (50%)
Acute Leukemia	32 (51,7%)	17 (53,1%)	15 (50%)
Median age (year)	54,47 (18,5 -68,95)	54,08 (19,57 - 68,95)	54,62 (18,5 - 68,5)

Table 1: Characteristic of patients

	TOTAL	Control	Aesthetic care
Anxiolytic IV	7 (11,1%)	1 (3%)	6 (20%)
Anxiolytic PO	26 (41,2%)	15 (45,4%)	11 (36,7%)
Hypnotic	18 (28,6%)	14 (42,4%)	4 (13,3%)
Antalgic Level 1 IV	26 (41,2%)	11 (33,3%)	15 (50%)
PO	17 (27%)	8 (24,2%)	9 (30%)
Level 2 IV	38 (60,3%)	23 (69,7%)	15 (50%)
PO	20 (31,7%)	11 (33,3%)	9 (30%)
Level 3 IV	19 (30,1%)	10 (30,3%)	9 (30%)
PO	1 (1,59%)	1 (3%)	0

Table 2: Consumption of antalgic and anxiolytic and hypnotic. (IV intra veinous, PO per os).

	TOTAL	Control	Aesthetic care
Nutritionist	50 (79,3%)	29 (87,9%)	21 (70%)
Psychologist	33 (52,3%)	16 (48,5%)	17 (56,7%)
Art Therapy	3 (4,8%)	2 (6%)	1 (3,3%)
Sport coaching	13 (20,6%)	7 (21,2%)	6 (18,2%)
Family visit 0	2 (3,2%)	0	2 (6,7%)
1	20 (31,7%)	12 (36,3%)	8 (26,7%)
2	41 (65,1%)	21 (63,6%)	20 (66,7%)

Table 3 : Other supportive care acces. (Family visit

0 : zero visit/week, visit 1 : only 1 or 2 days/week, visit 3 : every day)

Results

The average age of our cohort is 50.9 years (18.5 – 69 years) with a majority of women (57.1%) (Table1).

The two groups are comparable apart from the consumption of hypnotics, less important in the aesthetic care arm (13.3% vs 42.4 % (Table 2)).

The two groups are comparable apart from access to other supportive care (Table 3).

The assessment of anxiety is similar in both arms (p=0.93), with a non significant improvement in deep aplasia for the acute leukemia induction group (p=0,15) (Table 4).

Quality of life is also similar (p=0,4) (Table 4), however all patients in the aesthetic care arm have a significantly higher WHO-5 in deep aplasia (p=0.008) (Table 4).

	Control (n=32)	Aesthetic care (n=30)	Standard Différence (IC to 95%)	P-Value
Spielberger Anxiety Test				
V1	47 (34 to 59)	40 (26 to 49)		
V2	46 (34 to 55)	38,5 (27 to 49)		
V2-V1	- 2 (-8 to 1)	-3 (-8 to 2)	0,00 (- 0,48 to 0,46)	0,93
Sous-Gruppe AL n= 16				
v1	47 (36 to 64)	33 (26 to 55)		
v2	54 (39 to 65)	36 (23 to 48)		
v2-v1	-1 (-7 to 8)	-4 (-9 to 1)	-0,51 (-1,2 to 0,18)	0,15
FACT-Leukemia score				
v1	76 (69 to 86)	78 (65 to 85)		
v2	75 (68 to 82)	73 (66 to 85)		
v2-v1	-0,7 (-10 to 5,5)	0,0 (-10 to 11,3)	0,2 (-0,27 to 0,66)	0,37
WHO				
v1	16 (9 to 19)	14 (10 to 20)		
v2	8 (5 to 14)	12 (9 to 19)		
v2-v1	-3 (-8 to 0)	-1 (-5 to 2)	0,61 (0,15 to 1,08)	0,008

Table 4 : Analysis of questionnaire (Fact Leu, OMS, Spielberger anxiety).

Conclusion

In conclusion, aesthetic care seems to improve anxiety upon diagnosis announcement and significantly improve the well-being of all patients during prolonged aplasia.