A Retrospective Audit Investigating Supportive Care Needs Of Patients With Haematological Malignancies

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INTRODUCTION

Haematological malignancy (HM) patients have disease-related factors which increase demand for hospitalisation and invasive procedures including towards end of life.

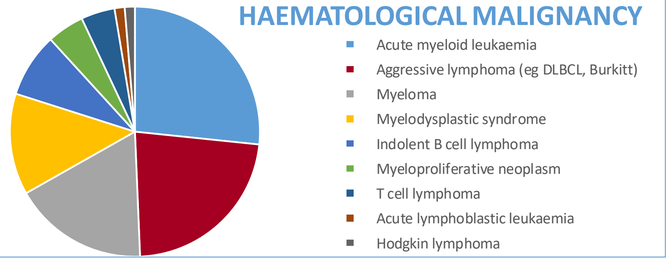
Frequent complications related to cytopenia occur, such as infection, bleeding and anaemia. Quality end-of-life measures for patients with solid organ malignancy poorly apply to patients with HM.

We aim to describe the healthcare utilisation and association of interventions with intensity of HM therapy received prior to death.

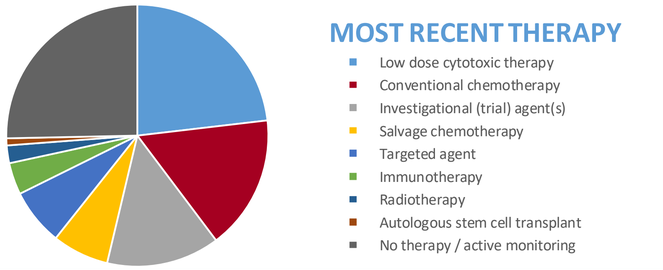
METHODS

This is a retrospective single centre cohort study of adult patients with HM deceased between 10-2019 and 07-2022. Patients were identified, and disease characteristics, therapy and outcomes were extracted from medical records. Univariate analysis (chi^2 test) was performed for associations.

HAEMATOLOGICAL MALIGNANCY



MOST RECENT THERAPY



IN THE LAST 30 DAYS OF LIFE…

- 65% Presented to emergency
- 22% Had an invasive procedure
- 61% Received red cells
- 22% Had an ICU admission
- 48% Received cytotoxic therapy
- 46% Received platelets

Table: Interventions, supportive care and procedures

Intervention	All patients (n=229)	
ICU admission within 30 days of death	50	21.8%
ED presentation within 30 days of death	150	65.5%
Last 14 days of life spent in hospital	92	40.2%
Last 30 days of life spent in hospital	46	20.1%
Invasive interventions (with 30 days of death)		
Intubation	21	9.2%
Non-invasive ventilation	15	6.6%
Cardiopulmonary resuscitation	11	4.8%
Renal replacement therapy	11	4.8%
Surgery (requiring operating theatre)	9	3.9%
Invasive procedure (excluding bone marrow biopsy)	50	21.8%
Treatment		
Chemotherapy within 7 days of death	40	17.4%
Chemotherapy within 30 days of death	111	48.4%
Supportive care		
Red cell transfusion within 30 days of death	139	60.7%
Transfused ≥10 units of red cells within 30 days of death	21	9.2%
Platelet transfusion within 30 days of death	106	46.2%
Transfused ≥10 pools of platelets within 30 days of death	34	14.8%
Antibiotics within 7 days of death	139	60.7%

RESULTS

229 patients included (median age 77 years, 35% female), 58% born outside Australia.

Clinical trial treatment was associated in the last 30 days of life with:
Use of cytotoxic therapy (p=0.03)
Platelet transfusions (p=0.01)
ICU admissions (p=<0.01)

Those on **intensive chemotherapy** were more likely to:
Have no resuscitation limitation (p=<0.01)
ICU admission within 30 days of death (p=<0.01)
Spend their last 14 or 30 days of life in hospital (p=0.01, p=<0.01).

Those receiving **non-intensive therapy** were more likely to:
Receive therapy in the week prior to death (p=<0.01)
Be red cell (p=0.02) and platelet transfusion (p=0.04) dependent

Those **not on therapy** (active monitoring) were more likely to:
Have a resuscitation limitation documented (p=<0.01)
Not be hospitalised before death (p=<0.01).

CONCLUSION

Within our cohort of patients with HM we found high rates of hospitalisation and cytotoxic therapy use in the last month of life, corresponding with high rates of transfusion and critical care admissions.

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