

Palliative care integration and end-of-life care intensity for patients with NSCLC

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Introduction

Combining PD-1/PD-L1 inhibitors with conventional chemotherapy can dramatically improve the prognosis of NSCLC patients, clearly enhancing the response rate and prolonging progression-free survival and overall survival. Pembrolizumab monotherapy can also improve overall and progression-free survival among patients with metastatic NSCLC and PD-L1 tumour score of 50 % or more.

With the recent therapeutic progress in the treatment of NSCLC patients, it is difficult to identify the right time for initiating PC team interventions. Insufficient PC staff resources make PC interventions irrelevant for asymptomatic patients responding to first-line immunotherapy with or without chemotherapy. Various models of PC integration have been described, and it is the oncologists' task to adequately detect the referral criteria triggering the first PC intervention: These criteria are based on patients' needs, such as severe physical or emotional symptoms, request for a hastened death, spiritual or existential crises, assistance's need with decision-making processes or care planning, bad prognosis when estimated median survival is under 12 months.

The main objective of this study was to evaluate the real-life integration of PC for patients with NSCLC cancer without oncogenic driver mutations treated in a large comprehensive centre, and to analyse the impact of early PC in decreasing aggressiveness in EOL care.

Conclusion

Highlights

- Early palliative care is recommended for advanced cancer patients according to the ASCO guidelines, but various models of PC integration have been described. It is more difficult to identify the right time for initiating PC team interventions with the recent therapeutic progress in the treatment of NSCLC patients.
- Cancer centres should monitor key indicators such as PC use (ratio of patients who meets PC team and median time before death) and aggressiveness criteria of EOL care (mainly systemic anti cancer treatment and acute hospitalisation in the last month before death)

Materials

This study was an observational single-centre study among patients with metastatic NSCLC treated at the Curie Institute in Paris.

All new patients with lung cancer treated in the Curie institute are systematically registered at diagnosis in a specific database regularly completed.

The inclusion criteria were the following:

- patients aged 18 years or older,
- locally advanced (Stage IIIB and IIIC without any possibility of treatment by radiochemotherapy with curative intent) or metastatic stage (Stage IV),
- diagnosis histologically confirmed of NSCLC, without oncogenic driver mutations (EGFR, KRAS, MET, ALK, ROS),
- treated with immunotherapy or a chemotherapy-immunotherapy combination
- date of death in the period from 01/2018 to 12/2022.

Results (1)

Population Study of 149 patients, 98 (66 %) were men with a mean age of 69 years (SD = 11) at death.
Histological type: 106 (71 %) tumours were adenocarcinomas and 27 (18 %) were epidermoid carcinomas.
Social characteristics: 53 (36 %) were single, 14 (9 %) patients were responsible for a dependent person and 6 (4 %) were in a socially precarious situation.
Severe comorbidities (mainly heart disease, stroke, and dementia) : 14 patients
Median time from onset of the first metastasis to death : 10.1 (4.9–19.5) months

Criteria (N=149)	Value (%)
PC team intervention	
Yes	75 (50.3)
No	74 (49.7)
Time between 1 st PC team visit and death in months (N=75)	
Median in months (Q1,Q3)	2.3 (1-6.1)
Mean (min-max)	5.6 (0-4.5)
None	74 (49.7)
90 days and more	32 (21.5)
60-90 days	12 (8.0)
30-60 days	11 (7.4)
15-30 days	7 (4.7)
15-0 days	13 (8.7)
Mean number of PC visits (min,max) (N=75)	3.3 (1-10)
Inpatient consultation	2.1 (1-6)
Outpatient consultation	2.5 (1-7)
Day care hospital	2.2 (1-7)

Results (2)

Criteria, in the last month before death	N (%)	PC Use > 30 days before death	No PC or PC use < 30 days before death	P value
Systemic anti-cancer treatment	59 (40 %)	11 (20 %)	48 (51 %)	p < 0.01
Occurring in the last 14 days	35 (23 %)	3 (5 %)	32 (34 %)	p < 0.001
≥ 1 emergency consultation	7 (5 %)	2 (4 %)	5 (5 %)	p = 1
Intensive care unit admission	8 (5 %)	0 (0 %)	8 (8 %)	p = 0.02
≥ 1 acute care hospitalization	18 (12 %)	5 (9 %)	13 (14 %)	p = 0.39
Hospitalization duration > 14 days	32 (21 %)	4 (7 %)	28 (30 %)	p = 0.01
Death in acute hospitalization (NA = 16)	64 (48 %)	9 (18 %)	55 (66 %)	p < 0.01
At least one criterion (NA = 10)	97 (70 %)	22 (44 %)	75 (85.2 %)	p < 0.01

PC: palliative care; NA: Not available.

Criteria, in the last month before death	N (%)	PC Use > 90 days before death	No PC or PC use < 90 days before death	P value
Systemic anti-cancer treatment	59 (40 %)	2 (6.2 %)	57 (48.7 %)	p < 0.01
Occurring in the last 14 days	35 (23 %)	0 (0 %)	35 (29.9 %)	p < 0.01
≥ 1 emergency room visits	7 (5 %)	0 (0 %)	7 (6 %)	p = 0.35
Intensive care unit admission	8 (5 %)	0 (0 %)	8 (6.8 %)	p = 0.2
≥ 1 acute care hospitalization	18 (12 %)	4 (12.5 %)	14 (12 %)	p = 1
Hospitalization duration > 14 days	32 (21 %)	2 (6 %)	30 (26 %)	p = 0.02
Death in acute hospitalization (NA = 16)	64 (48 %)	3 (10.3 %)	61 (59 %)	p < 0.01
At least one criterion (NA = 10)	97 (70 %)	9 (31 %)	88 (81 %)	p < 0.01

PC: palliative care; NA: Not available.