

A Comparison of Urgent versus Routine Referrals to an Outpatient Oncology Palliative Care Clinic

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Background and Aims

- Early palliative care is increasingly recommended alongside standard oncology care for patients with advanced cancer,¹ with several RCTs demonstrating improved symptom assessment, management, quality of life, satisfaction with care, and in some cases, prolonged survival.²⁻⁵
- Patients initially seen in the outpatient palliative care setting have been shown to have fewer emergency department visits, less prolonged hospital stays and intensive care admissions in the last month of life, and were less likely to die in an acute care setting.⁶
- At the Princess Margaret Cancer Centre, Toronto, there are 27 half-day palliative care clinics per week. Patients are referred by their oncologist, triaged based on symptom intensity and/or prognosis, and seen within 2 weeks of their referral. Patients can also be seen on an urgent, same day basis as needed.⁷
- The aim of this study was to look at differences between those patients referred as urgent, same day referrals versus those seen as routine scheduled appointments.

Methods

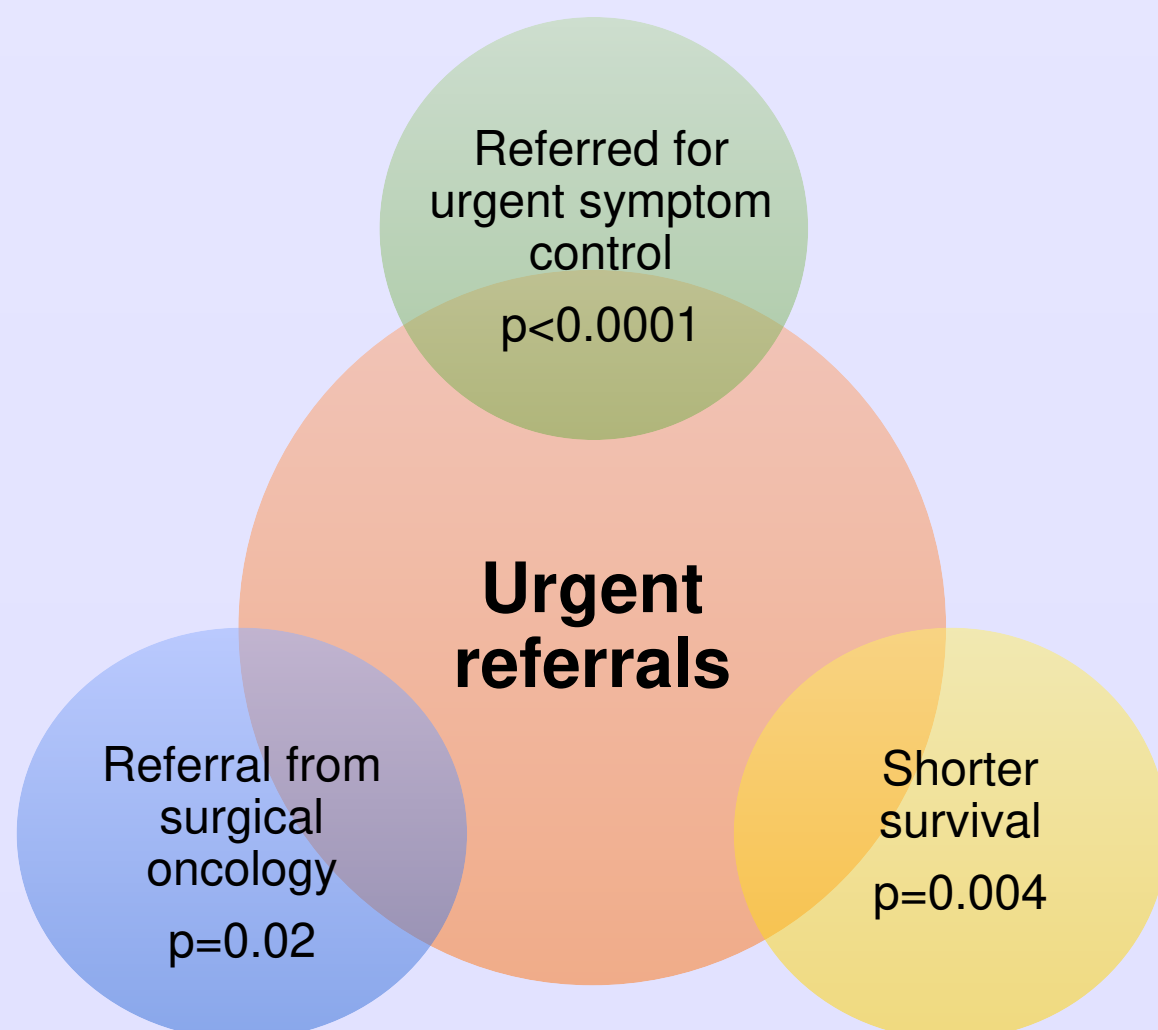
- We retrospectively reviewed all urgent referrals seen by the palliative care team, between January 1st 2016 and December 31st 2017, and compared these to a random selection of patients (1:2 ratio) referred to the outpatient oncology palliative care clinic at the Princess Margaret Cancer Centre (PM) for routine assessment.
- Demographic and clinical characteristics were obtained from the PM palliative care clinical database and patients' electronic medical record.

Results – Table 1: Demographic and clinical characteristics

Patient characteristics	Total (N=330)	Routine Referrals (N=217)	Urgent Referrals (N=113)	P-Value
Age at referral: Median (range)	67.5 (23.9-94.3)	68.0 (23.9-92.8)	66.0 (28.0-94.3)	0.12
Male sex	167 (50.6%)	114 (52.5%)	53 (46.9%)	0.33
Toronto area of residence	199 (60.3%)	133 (61.3%)	66 (58.4%)	0.08
Married/Common Law	230 (70.8%)	151 (70.6%)	79 (71.2%)	0.90
Referring service				0.003
Haematology	10 (3.0%)	8 (3.7%)	2 (1.8%)	
Medical oncology	209 (63.3%)	142 (65.4%)	67 (59.3%)	
Radiation oncology	73 (22.1%)	46 (21.2%)	27 (23.9%)	
Surgical oncology	28 (8.5%)	11 (5.1%)	17 (15.0%)	
Other	10 (3.0%)	10 (4.6%)	0	
Reason for referral				<.0001
Advanced care planning (ACP)	21 (6.4%)	14 (6.5%)	7 (6.2%)	
Symptom control	198 (60.0%)	108 (49.8%)	90 (79.6%)	
Symptom control & ACP	111 (33.6%)	95 (43.8%)	16 (14.2%)	
Outcome from initial consult				<.0001
Admission	22 (6.7%)	2 (0.9%)	20 (17.7%)	
Clinic follow-up	231 (70.0%)	163 (75.1%)	68 (60.2%)	
Follow-up elsewhere	17 (5.2%)	10 (4.6%)	7 (6.2%)	
Referral to home palliative MD	60 (18.2%)	42 (19.4%)	18 (15.9%)	
Palliative Performance Scale status ^a				0.02
30	1 (0.4%)	1 (0.6%)	0 (0.0%)	
40	16 (6.2%)	7 (3.9%)	9 (11.5%)	
50	49 (18.9%)	31 (17.1%)	18 (23.1%)	
60	83 (32.0%)	58 (32.0%)	25 (32.1%)	
70	82 (31.7%)	62 (34.3%)	20 (25.6%)	
80	22 (8.5%)	18 (9.9%)	4 (5.1%)	
90	5 (1.9%)	3 (1.7%)	2 (2.6%)	
100	1 (0.4%)	1 (0.6%)	0	
Median survival time	7.5 months	8.1 months	4.3 months	0.001
95% CI	6.2-8.3	7.2-9.5	3.4-7.8	

^a Palliative Performance Scale (PPS) score of 80–100=fully ambulatory, 60–70=reduced ambulation, 40–50=mainly lying/sitting and 10–30=bedbound

Figure 1: Factors associated with urgent referrals



Results – Table 2: Edmonton Symptom Assessment System (ESAS) scores

Items	Routine Referrals (N=217)	Urgent Referrals (N=113)	P-Value
Pain, mean ± SD (N)	5.1 ± 3.0 (N=214)	6.5 ± 3.1 (N=66)	0.0007
Tiredness, mean ± SD (N)	5.9 ± 2.8 (N=213)	6.8 ± 2.9 (N=65)	0.02
Drowsiness, mean ± SD (N)	4.1 ± 3.0 (N=211)	4.8 ± 3.3 (N=64)	0.14
Nausea, mean ± SD (N)	2.0 ± 2.8 (N=206)	2.8 ± 3.3 (N=64)	0.12
Appetite, mean ± SD (N)	4.7 ± 3.0 (N=211)	5.5 ± 3.1 (N=64)	0.07
Breathlessness, mean ± SD (N)	3.2 ± 3.1 (N=212)	2.9 ± 3.2 (N=64)	0.34
Depression, mean ± SD (N)	3.3 ± 3.0 (N=213)	4.1 ± 3.4 (N=64)	0.13
Anxiety, mean ± SD (N)	3.5 ± 3.0 (N=212)	4.4 ± 3.4 (N=61)	0.06
Wellbeing, mean ± SD (N)	5.0 ± 2.7 (N=213)	6.4 ± 2.8 (N=64)	0.001
Constipation, mean ± SD (N)	3.5 ± 3.3 (N=211)	5.0 ± 3.8 (N=48)	0.02
Insomnia, mean ± SD (N)	4.3 ± 3.1 (N=208)	5.6 ± 3.5 (N=47)	0.01
EDS ^a , mean ± SD (N)	36.8 ± 18.0 (N=213)	44.3 ± 19.7 (N=65)	0.01
TDS ^b , mean ± SD (N)	44.6 ± 21.5 (N=213)	54.4 ± 23.9 (N=64)	0.005

^a EDS (ESAS Distress Score) is calculated by summing all items except constipation and insomnia. EDS range is 0–90, with higher numbers representing worse symptom severity

^b TDS (Total Distress Score) is calculated by summing all 11 items. TDS range is 0–110, with higher numbers representing worse symptom severity

Discussion and Conclusions

- Surgical oncology was more likely to refer urgently for a palliative care assessment than a routine assessment.
- Patients referred urgently to palliative care clinics had a poorer performance status overall, were more likely to require an urgent admission, and had shorter survival times than those seen as a routine referral
- There was a trend towards patients in the urgent group having higher ESAS scores for pain, constipation, fatigue, sleep disturbance and overall wellbeing.
- Earlier palliative care referral should continue to be encouraged in order to ensure patients receive timely, appropriate engagement with services and to limit the need for urgent referrals and admissions at the end of life.
- Institution-wide standardized referral criteria for palliative care clinics may reduce the number of late, urgent referrals.
- Palliative care outpatient teams should consider how to incorporate urgent referrals into their daily clinic schedule.

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References

1. Ferrell BR et al. Integration of Palliative Care Into Standard Oncology Care: American Society of Clinical Oncology Clinical Practice Guideline Update. J Clin Oncol [Internet]. 2017 Jan [cited 2018 Mar 16];35(1):96–112.
2. Bakitas et al. Effects of a palliative care intervention on clinical outcomes in patients with advanced cancer: the Project ENABLE II randomized controlled trial. JAMA [Internet]. 2009 Aug 19 [cited 2018 May 25];302(7):741–9.
3. Temel et al. Early palliative care for patients with metastatic non-small-cell lung cancer. N Engl J Med [Internet]. 2010 Aug 19 [cited 2016 Nov 16];363(8):733–42.
4. Zimmermann C et al. Early palliative care for patients with advanced cancer: a cluster-randomised controlled trial. Lancet (London, England) [Internet]. 2014 May 17 [cited 2016 Oct 25];383(9930):1721–30.
5. Kavalieratos D et al. Association Between Palliative Care and Patient and Caregiver Outcomes: A Systematic Review and Meta-analysis. JAMA [Internet]. 2016 Nov 22 [cited 2017 Jun 5];316(20):2104–14.
6. Hui D et al. Impact of timing and setting of palliative care referral on quality of end-of-life care in cancer patients. Cancer [Internet]. 2014 Jun 1 [cited 2018 Mar 16];120(11):1743–9.
7. Hannon B et al. The oncology palliative care clinic at the Princess Margaret Cancer Centre: an early intervention model for patients with advanced cancer. Support Care Cancer [Internet]. 2015 Apr [cited 2016 Oct 25];23(4):1073–80.