Patient Centred Care

June 2024

A Collaborative Approach to Treating Hospital Avoidant Patients

viewhealth
chemo@home

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About View Health - chemo@home

5 States

National home cancer therapy service. We have services available in WA, SA, VIC, NSW and QLD

1800+

Private hospital substitution service treating over 1800 patients/month. PHI, pharma programs and clinical trials

94%

Patients thought the experience of having their treatment at home was excellent

Introduction

- Anxiety disorders interfere with daily activities and can impair a person’s family, social and school or working life. Health anxiety is a common condition diagnosed in 4-5% of people. It is believed the disorder often goes undiagnosed and may affect more than 10% of the population

- Early diagnosis and adherence to treatment schedule can be the difference between favourable and non-favourable outcomes

- This case study presents a collaborative approach to providing chemotherapy to a young, hospital avoidant gentleman who would have otherwise not received any treatment

Patient Background

Patient X is an 18-year-old man who lives at home with his parents and 3 brothers in a small town in the southeast of Western Australia

Diagnosed with an 11cm right paraspinal Ewing sarcoma at L4 to S2 in August 2023

After initial investigations and diagnosis, a TIVAD was inserted. He was referred to the Oncology Outpatient dept of Fiona Stanley Hospital for treatment with the VDC/IE protocol

Although undiagnosed, his mother reported him as being neurodiverse. He had struggled with anxiety for most of his life and had interrupted school attendance and education as a result

Hospital Avoidance

Attended his first appointment as scheduled, however became overwhelmed during education session and left the day unit

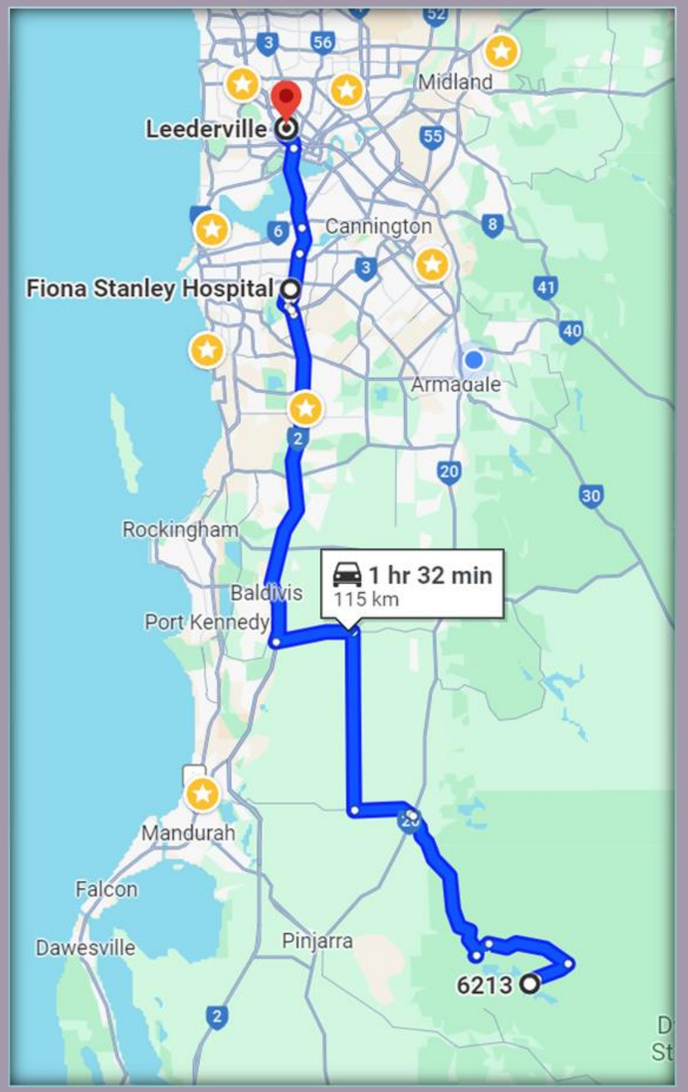
Despite the efforts of his family and Oncologist, he refused to return to the hospital

CAH was approached by the WA Cancer and Palliative Care network YA representative to provide treatment at home

This occurred in October, 2 months after diagnosis. At this point, X was yet to meet his Oncologist face to face

Eligibility for Treatment at Home

- Live within 1-1.5hrs of office/nurse
- Suitable treatment protocol (time, drugs, reaction risk)
- Suitable PHI cover
- Requirement for compliance and collaboration (pretreatment bloods, supportive care medication)



Protocol - VDC

Cycle 1 to 7

Drug	Dose	Route	Day
DOXOrubicin #	37.5 mg/m^2	IV ##	1 and 2
vinCRISTine	1.5 mg/m^2 (Cap dose at 2 mg)	IV infusion	1
Mesna	400 mg/m^2 *	IV infusion	1
CYCLOPHOSPHamide	1,200 mg/m^2	IV infusion	1
Mesna	800 mg/m^2	PO	1
Pegfilgrastim	6 mg	Subcut	3

Being able to facilitate this treatment at home required development of a treatment protocol suitable for home administration by our clinical pharmacy team.

Doxorubicin is given as a prolonged infusion (4hrs) in patients where it is anticipated to receive full dose of 450mg/m2 to reduce cardiac toxicity.

4-hour infusion was too long for treatment at home. In Collaboration with the oncologist, a protocol including a 24hr doxorubicin infusion via an elastomeric bottle was created.

Protocol - IE

Cycle 1 to 7

Drug	Dose	Route	Day
Etoposide *	100 mg/m^2	IV infusion	1 to 5
Mesna	600 mg/m^2	IV infusion	1 to 5
iFOSFamide	1,800 mg/m^2	IV infusion	1 to 5
Mesna	600 mg/m^2 at 4 and 8 hours after the initiation of ifosfamide	IV infusion #	1 to 5
Pegfilgrastim	6 mg	Subcut	6

5 consecutive days of over 3 hours treatment.

IV mesna substituted with oral for the doses at 4 and 8 hours post ifosfamide.

Treatment schema for VDC alternating with IE

Cycle	Week	Treatment	Surgery	Cycle	Week	Treatment	Radiation therapy
1	1	VDC		1	1	VDC	
2	3	IE		2	3	IE	
3	5	VDC		3	5	VDC	
4	7	IE		4	7	IE	
5	9	VDC		5	9	VDC	
6	11	IE		6	11	IE	
-		-	Surgery	7	13	VDC	Radiation therapy
7	13	VDC		8	15	IE	Radiation therapy
8	15	IE		9	17	VC	Radiation therapy
9	17	VDC		10	19	IE	
10	19	IE		11	21	VC	
11	21	VC		12	23	IE	
12	23	IE		13	25	VDC	
13	25	VC		14	27	IE	
14	27	IE					

Collaboration

Prior to treatment commencing we had several conversations with the oncologist regarding pretreatment checks, ongoing surveillance and clinical governance

Blood Tests

Attend to pretreatment blood tests at a community collection centre

Pathology

Reviewed before treatment by the clinical pharmacist and clinical coordinator. Any concerns discussed with oncologist.

Treatment

Administered by CAH clinical team. Discharge summary emailed to the oncology team

Supportive Care

With parental assistance self-administer supportive care medications (antiemetics, steroids, pegfilgrastim)

Clinical Reviews

Regular clinical reviews via phone consult with the expectation that every 2nd or 3rd review would be in person

Benefits to Having Treatment at Home

NO

Travel time/parking

Less time; no waiting in a busy clinic for a chair to become available and no waiting for a nurse to be available to cannulate, put up chemo, flush

One on one time with a nurse, creating the opportunity for education, counselling, support

Reduced exposure to communicable illness and infection

Reduction in treatment related symptoms

Challenges

Management of health anxiety

Treatment delays

Not presenting to F2F clinic appointments

Refusal to have treatment

Scheduling appointments

Outcome

Received 9 out of 14 cycles of treatment to date

Completed 6 weeks of radiotherapy - attending every day!

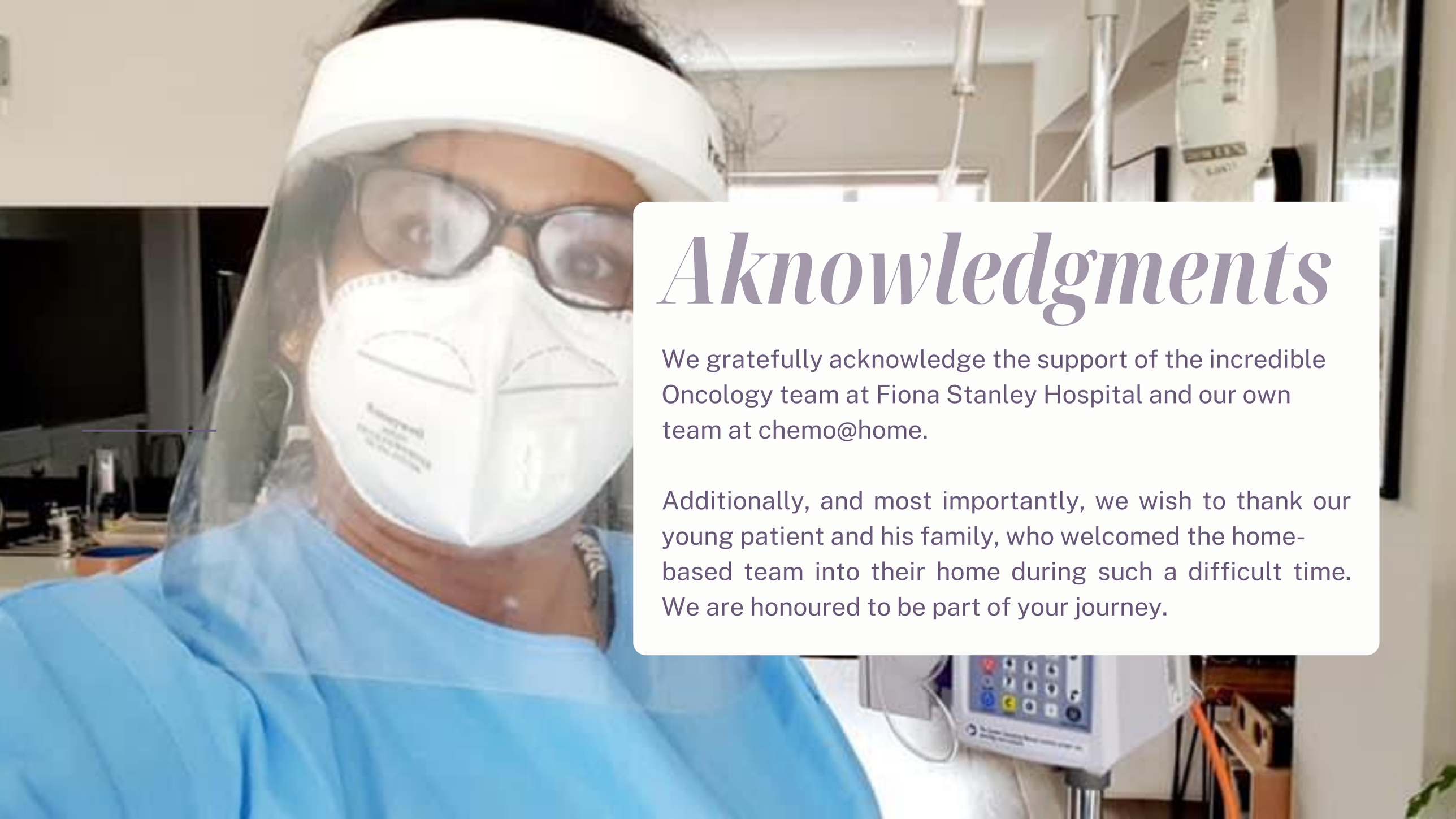
Staging scans toward the end of his radiotherapy showed a pleasing partial response to treatment

Encouraged to adhere to remaining chemotherapy treatments to reduce the likelihood of needing surgery

Cycle	Date Due	Date Received	Treatment Administered	Comment
1 VDC	21/11/2023	21/11/2023	Akynzeo 300mg/500mcg PO Dexamethasone 8mg PO Vincristine sulphate 2mg IV Mesna 1000mg IV/15 minutes Cyclophosphamide 2400mg IV Mesna 2000mg PO at 2 and 6 hrs after completion of cyclophosphamide	Doxorubicin elastomeric bottle not attached due to concerns regarding infusport patency.
1 IE	04/12/2023	D1- 04/12/2023 D2- 05/12/2023 D3-06/12/2023 D4-07/12/2023 D5-08/12/2023	**Day 1-5** Akynzeo 300mg/500mcg PO (D1 only) Dexamethasone 8mg PO Etoposide 200mg IV Mesna 1000mg IV Ifosfamide 3600mg IV Mesna 2000mg PO at 2 and 6 hrs after completion of ifosphamide Palonosetron 500mcg IV (D4 only)	Complete cycle received on schedule. Patient remained well throughout.
2 VDC	18/12/2023	04/01/2024	Akynzeo 300mg/500mcg PO Dexamethasone 8mg PO Vincristine sulfate 2mg IV Mesna 1000mg IV/15 minutes Cyclophosphamide 2400mg IV Doxorubicin 152mg IV Mesna 2000mg PO at 2 and 6 hrs after completion of cyclophosphamide	Treatment delay due to soft tissue infection on lower left leg requiring treatment with oral antibiotics.

			Mesna 2000mg PO at 2 and 6 hrs after completion of ifosphamide Palonosetron 500mcg IV (D4 only)	injections for 2 days then commenced Eliquis.
3 VDC	12/02/2024	12/02/2024	Akynzeo 300mg/500mcg PO Dexamethasone 8mg PO Vincristine sulfate 2mg IV Mesna 1000mg IV/15 minutes Cyclophosphamide 2400mg IV Doxorubicin 152mg IV Mesna 2000mg PO at 2 and 6 hrs after completion of cyclophosphamide	Treatment received on schedule, without incident. Failed to attend oncology appointment, did attend surgical appointment
3 IE	26/02/2024	D1-05/03/2024 D2- 06/03/2024 D3- 07/03/2024 D4- 08/03/2024 D5- omitted	**Day 1-4** Akynzeo 300mg/500mcg PO (D1 only) Dexamethasone 8mg PO Etoposide 200mg IV Mesna 1000mg IV Ifosfamide 3600mg IV Mesna 2000mg PO at 2 and 6 hrs after completion of ifosphamide Palonosetron 500mcg IV (D4 only)	Refusal to have pretreatment bloods taken- 1 week delay. Patient refused to have D5 of treatment.
4 VDC	19/03/2024	19/03/2024	Akynzeo 300mg/500mcg PO Dexamethasone 8mg PO Vincristine sulfate 2mg IV Mesna 1000mg IV/15 minutes Cyclophosphamide 2400mg IV Mesna 2000mg PO at 2 and 6 hrs after completion of cyclophosphamide	Doxorubicin omitted due to upcoming radiotherapy. Treatment cycles to be three weekly during radiotherapy.
4 IE	09/04/2024	D1-29/04/2024 D2- 30/04/2024 D3- omitted.	**Day 1-2** Akynzeo 300mg/500mcg PO (D1 only) Dexamethasone 8mg PO	Several delays in starting cycle. Patient refused to attend to pretreatment pathology

		D4- omitted. D5- omitted	Etoposide 200mg IV Mesna 1000mg IV Ifosfamide 3600mg IV Mesna 2000mg PO at 2 and 6 hrs after completion of ifosphamide	(twice)then requested another week delay due to Mum travelling away for work (Patient did not want to go ahead if Mum wasn't home). Only received 2 days of treatment. Refused D3-5. Daily radiotherapy commenced on 23/04/2024 for 6 weeks.
5 VDC	20/05/2024	07/06/2024	Akynzeo 300mg/500mcg PO Dexamethasone 8mg PO Vincristine sulfate 2mg IV Mesna 1000mg IV/15 minutes Cyclophosphamide 2400mg IV Mesna 2000mg PO at 2 and 6 hrs after completion of cyclophosphamide	Delayed several times due to refusal to have pretreatment pathology. Continues to attend radiotherapy daily. Doxorubicin omitted
5 IE	01/07/2024			
6 VDC				
6 IE				
7 VDC				
7 IE				



Aknowledgments

We gratefully acknowledge the support of the incredible Oncology team at Fiona Stanley Hospital and our own team at chemo@home.

Additionally, and most importantly, we wish to thank our young patient and his family, who welcomed the home-based team into their home during such a difficult time. We are honoured to be part of your journey.

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