


Alternative to Inpatient Transplantation



Karolinska University Hospital
Huddinge, Sweden

THE FIRST PATIENT IN HOMECARE 1997



- Still alive and well 17 years post tx. Working fulltime and now grown up kids.

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1997

- 1997 was the year we started to offer home-care to patients living in the Stockholm area.
- We had heard that patients suffering from cystic fibrosis treated in there homes had less infections and that's a benefit for allo-SCT patients.
- In US you had started to treat autologous patients in different home-care settings, one reason was to reduce costs.
- In Canada James Russel had treated a few allogeneic SCT patients in an outpatient setting.

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PATIENTS AND ORGANISATION

- There are just about 12 patients per year from the Stockholm area that fulfill the criteria for home care and therefore can be treated at home.
- 12 patients per year are to few to have a separate organisation for those patients.
- We connect home care to the ward.
- To organise home care just one more nurse had to be employed. All together five nurses from the ward has to be involved in home care and capable to take care of these patients at home. They also work at the ward.

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NURSE AT HOME

- The nurse will check on vital signs, temperature and blood pressure. Take bloodsamples and cultures if the patient have fever.
- She/he will check on food intake and give total parenteral nutrition if needed.
- Check on mucositis
- Give iv medications, erythrocytes and platelets if needed.
- Leave medicines for at least three days
- Go back to the ward and discuss the patient with the physician.
- After checking all results for the day the physician will phone the patient to ask if everything is ok or to change medication if necessary

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- We can have max. 4 patients at home at the same time depending on available patients and the number of available nurses.
- The patients get the conditioning at the hospital. This is to let the staff know the patient and vice versa.
- They can leave for home care the day of cellinfusion or as soon as they feel for it.
- If the patient need more than two visits per day they have to come back to the hospital.

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THIS IS THE WAY WE ORGANIZE HOME CARE IN AN ALLOGENEIC SETTING

- The patient and relative are informed about the procedure.
- Then we check the home to see if the criteria for homecare is fulfilled before start of conditioning.
- The patient is allowed to go home from the day after cell infusion.
- A nurse from the ward visits the patient once or twice a day if needed
- A physician from the ward phone the patient in the afternoon every day.
- *The water temperature has to be at least 50°C*
- *All dust collectors such as dried flowers has to be removed from where the patient is*
- *No pets are allowed*
- *The home has to be in the Stockholm area.*
- *There has to be a relative or friend able and willing to stay at home with the patient.*

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Bags with everything



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Boxes with everything



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**REASON FOR READMISSION
IN THE FIRST 147 PATIENTS**

Reason	Number	Reason	Number
Fever	55	CVL problem	3
Mucositis	2	Nausea	4
Abdominal pain	4	No person to stay at home with the pat.	4
Leg pain	2	Nose bleeding	2
Diarrea	4 (one haemorrhagic)	Other	10
Skin rash	5	*	

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THE UNIT:

- We try to do the best for the patient at the ward.

TV, Video, CD and a bicycle



**BUT NOTHING IS LIKE HOME.
WHAT CAN BE DONE AT HOME?**

- Almost everything they feel for
- Take dayly walks to get hungry and breath deeper
- Eat together with the family
- Play games, watch TV, make food
- Exercise



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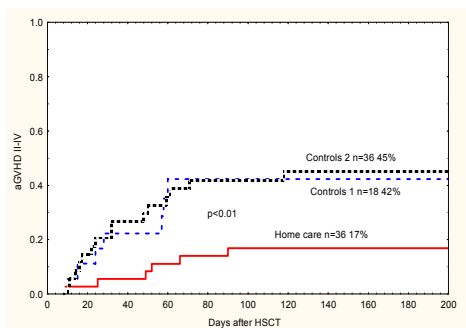
WHAT ARE THE PATIENT NOT ALLOWED TO DO?

- NOT plant flowers or other garden work
- NOT any work in wet environments
- NOT stay too close to any building constructions

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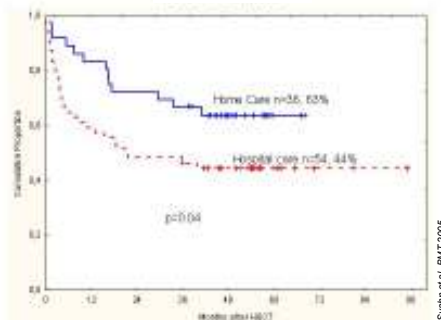
ACUTE GVHD GRADE II-IV



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SURVIVAL



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THIS ENCOURAGE US TO GO ON BUT WHY MAY IT BE BETTER TO BE TREATED AT HOME?

- We thought it could be because of better nutrition at home
- Less stress
- More comfortable

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ABOUT NUTRITION

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THIS ENCOURAGED US TO CONTINUE

WHAT IS IMPORTANT?
WHAT WAS POSSIBLE TO CHANGE TO THE BETTER IN THE HOSPITAL.



- We let the patients take a walk outside the hospital after 6 pm and weekends to see if exercise could help.

- We focused on nutrition and since 2006 we have a specialised team with a goal to give the patients more appealing food



This in the Hospital

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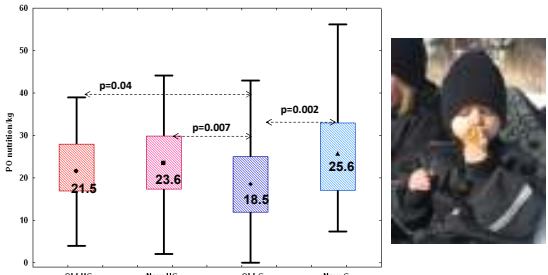
This is what the patients can choose between



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ORAL NUTRITION CAL/KG/DAY




Group	Mean (kcal/kg/day)
Old HC	21.5
New HC	23.6
Old C	18.5
New C	25.6

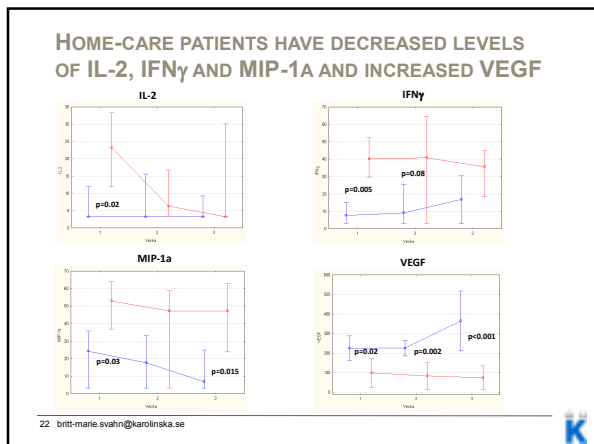
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ABOUT IMMUNEACTIVATION

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WE ALSO WANTED TO DETERMINE PATIENTS' OPINIONS ABOUT HOME CARE.

- A survey analysis was done.
- In this study we used the Sympathy- Acceptance-Understanding- Competence (SAUC) instrument.
- In total, 41 patients, 19 (46%) in home care and 22 (54%) in hospital care were included in the study.
- 24 relatives answered to there survey

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RESULTS

- Patients in the home care group and the hospital care group rated a high satisfaction with the care and support during the acute post transplantation phase.
- Patients in the home care group expressed to a greater extent that they had a feeling of being seen as a person not as a patient.
- The relatives rated the homecare high just 4 had some complains regarding information.

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MULTIVARIATE ANALYSIS OF FACTORS INFLUENCING PROBABILITY OF ACUTE GRAFT-VERSUS-HOST DISEASE GRADES II-IV AND NOT MATCHED FOR IN THE COMPARISON BETWEEN HOME CARE AND CONTROL PATIENTS

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Factor	HR	95% confidence interval	p-value
Home care vs. hospital care	0.41	0.19 – 0.86	0.02
Oral nutrition*	0.98	0.94 – 1.01	0.13
Number of days at home	0.92	0.88 – 0.98	0.004

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THIS IS WHAT A 10 YEAR BOY THOUGHT

- In the hospital I had stopped eating long time ago. I felt sic just seeing the menues.
- At home I could eat my mother's good food.
- It is never as safe as in the hospital, help is just a click away.
- One feels that mother and father is compleatley safe in the hospital and at home it can get a little more concern.
- It was comforting to have the nurses coming home every day both for me and my mother.

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- Sibling is very helpful, it is easier to get started and even to fight a bit.
- My siblings also liked mother to be at home.
- It is a big relief to be able to go out when ever I like to. In the hospital I had to wait untill 6pm.
- My friends came home to me and thought it wasn't as scaring as coming to the hospital.



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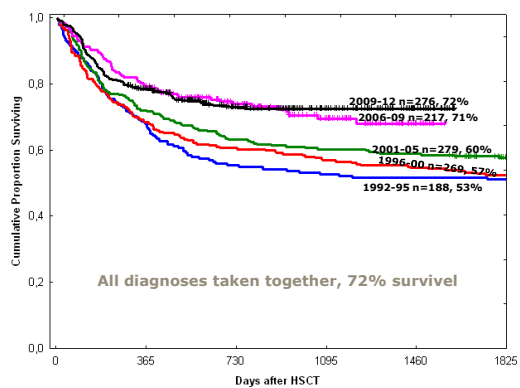


HE SAID "TRY IT AND YOU WILL STAY AT HOME"



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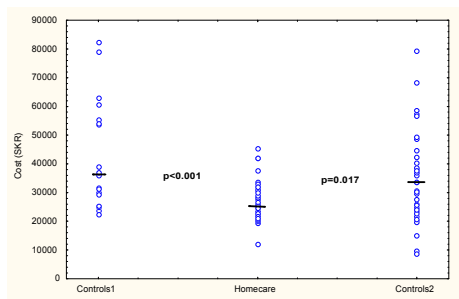




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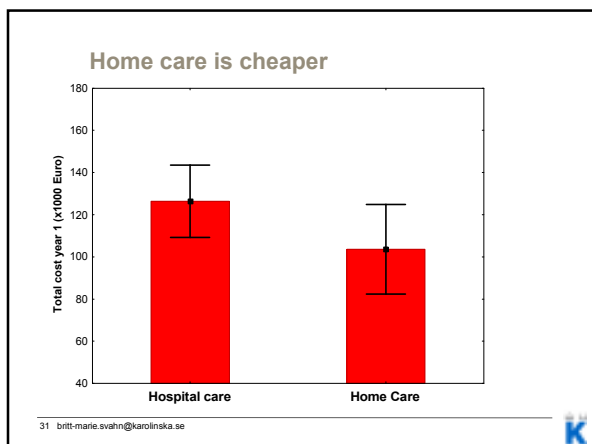


TOTAL COST



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CONCLUSION

- After 17 years and 222 patientes treated at home we can tell home care is safe or at least not more dangerous than to be treated at the hospital.
- Many days at home is associated with low risk of aGVHD.
- Patients like to have this opportunity
- We can use the hospital beds more effectively
- Home care might be cheaper compared to hospital care
- AND we cannot be sure of anything without a randomized study.

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Thanks to all involved:
staff, patients and
relatives !
