



Optimizing data collection at a BMT unit

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No disclosure

Overview:

- Presentation of center
- What was our problem
- What did we do
- How is it going so far
- Local experiences from implementing Med-A day 0
- How we keep track on forms due



Transplant history in Copenhagen

- First transplant performed April 1971
- Second transplant performed December 1972
- 110-120 first transplants each year

- Myeloablative and non- myeloblative transplants
- Children and adults
- Using BM, PBSC, single and double CBU

- 2000 first transplants
- 1430 myeloablative
- 533 non-myeloablative

Our center provides data for:

- EBMT - day 0, day +100 and annual
- CIBMTR - day 0, day+100, day+180 and annual
- Different CBB - various
- Local database - day 0, day +100 and annual
- Research center under CIBMTR
- 1000 patients are due to follow up each year.

What was the problem

- Accurate data collection is essential
- No tradition for systematically performing audits
- Most data available - but lack of evaluation
- Physicians not familiar with data collection according to EBMT/CIBMTR
- Preparing for a JACIE accreditation

What did we do

Information required for the patient file by day +100, +180 and Annual.

The aim of this tool is to collect correct information on HSCT patients.

Our center collects information for the local database, CIBMTR, EBMT, Donor Registers and Cord Blood Banks.

A number of patients are enrolled in protocols and studies which often requires similar information.

The consulting physician evaluates and documents the following in the patient file:

Status of remission; requires the physician's assessment by blood samples, biopsies, scans (etc.)

GvHD; requires the physician's assessment and diagnosis.

Liver-, lung-, and other complications; requires the physician's assessment and diagnosis.

Karnofsky score and occupational status; informed by the patient at the consultation.

The Data Manager looks up information about:

Take; according to the applicable definitions by reviewing the blood tests and transfusion records in the patient's file.

Infections; the clinical microbiology tests are reviewed.

Secondary malignancy; are found in the national pathology database in Denmark.

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Data asessed by the consulting physician	Day +100	Day +180	Annual
Karnofsky score	•	•	•
Status of remission	•	•	•
Start of aGvHD, organ involvement, stage and grade	•	•	•
Start of cGvHD organ involvement, grade and overall severity	•	•	•
Liver complications	•	•	•
Pulmonary complications	•	•	•
Other complications (TAM, renal failure requiring dialysis, hemorrhage, avascular necrosis, heart failure, diabetes, gonadal dysfunction)	•	•	•
Occupational status		•	•
Date of withdrawal of immunosuppressive agents		•	•

Data collected by the data manager	Day +100	Day +180	Annual
Take	•		
Infection	•	•	•
Secondary malignancy	•	•	•

Akut GvHD Grading and Staging:

Stage	Skin	Liver (bilirubin)	Gut/GI (diarrhea)*
1	< 25%	> 34 µmol/l - 2-3 mg/dl	> 500 ml (> 283 ml/m ²)
2	> 25-50%	> 52 µmol/l - 3-6 mg/dl	> 1000 ml (> 555 ml/m ²)
3	> 50-100%	> 103 µmol/l - 6-15 mg/dl	> 1500 ml (> 833 ml/m ²)
4	+ bullous formation	> 255 µmol/l - > 15 mg/dl	+ severe abdominal pain = ileus

*Diarrhea are related to surface for patients < 40 kg
Upper GI GvHD verified by biopsy = GI stadium 2 I.

Grading:

Grade I	Skin 1-2	-	Liver 0 and/or Gut 0
Grade II	Skin 1-3	-	Liver 1 and/or Gut 1
Grade III	Skin 2-3	-	Liver 2-3 and/or Gut 2-3. And affected general condition.
Grade IV	Skin 2-4	-	Liver 2-4 and/or Gut 2-4. And severe affected general condition.

Body Area	Percent	Total Percentage
Each Arm	9%	18%
Each Leg	18%	36%
Chest & Abdomen	18%	18%
Back	18%	18%
Head	9%	9%
Pubis	1%	1%

VOD (a.m. Jones)

Bilirubin > 34 µmol/l and at least two of the following a. hepatomegaly. b. ascites. c. weight gain > 5 % before day 21

Chronic GvHD

Report "limited" if chronic GvHD includes only localized skin involvement and/or liver dysfunction.

Report "extensive" if any of the following symptoms are attributed to chronic GvHD.

Generalized skin involvement and/or liver dysfunction

Liver histology showing chronic aggressive hepatitis, bridging necrosis, or cirrhosis

Involvement of the eye

Involvement of the salivary glands or oral mucous membranes

Involvement of any other target organ

Overall severity of chronic GvHD

Currently there are no specific criteria for the severity of chronic GvHD. This subjective assessment should be reported as documented by the physician using the guidelines below:

Mild - signs and symptoms of chronic GvHD do not interfere substantially with function and do not progress once appropriately treated with local therapy or standard systemic therapy (corticosteroids and/or CyA, FK 506/M.D./F/Sirolimus).

Moderate - signs and symptoms of chronic GvHD interfere somewhat with function despite appropriate therapy or are progressive through first line systemic therapy (corticosteroids and/or CyA, FK 506/M.D./F/Sirolimus).

Severe - signs and symptoms of chronic GvHD limit function substantially despite appropriate therapy or are progressive through second line therapy

Karnofsky	Performance	Lansky
Normal. No complaints. No evidence of disease.	100	Fully active, normal
Able to carry on normal activity. Minor signs or symptoms of disease.	90	Minor restrictions with strenuous physical activity
Normal activity with effort. Some signs or symptoms of disease.	80	Active, but gets tired more quickly
Cares for self. Unable to carry on normal activity or to do active work.	70	Both greater restriction of, and less time spent in, active play.
Requires occasional assistance, but is able to care for most of personal needs.	60	Up and around, but minimal active play; keeps busy with quieter activities
Requires considerable assistance and frequent medical care.	50	Lying around much of the day, but gets dressed; no active play; participates in all quiet play and activities
Disabled. Requires special care and assistance.	40	Mostly in bed; participates in quiet activities
Severely disabled. Hospital admission is indicated although death is not imminent.	30	Stuck in bed; needs help even for quiet play
Hospitalization necessary. Very sick, active supportive treatment necessary.	20	Often sleeping; play is entirely limited to very passive activities
Moribund; fatal processes progressing rapidly.	10	Does not play nor get out of bed
Dead	0	Unresponsive

Standard note day +100

CPR-nr. [Redacted]	Navn [Redacted]	Kontaktansvar 4041L9	Kontaktperiode 18.06.2015 -
Jdsegningsperiode 01.10.2015 -	Producent/Beh. -/-	Beh.kat./Notattype -	Sygehus(e) 1301

19.11.2015 09:40 B Notat Læge 4041L9 Hæmatologisk ambulatorium 4041 130

Ambulant kontrol dag +100
 Siden sidst: (ro i akut hud GVH)
 Karnofsky score:100
 Remissionsstatus:CR

aGVHD: har haft akut hud GVH
 Cav oris: 0
 Hud: yes
 Tarm: 0
 Lever: 0
 Lunger: 0

cGVHD: 0

Infektion: 0
 Komplikationer: 0

Ses igen: ca hver 14. dag

Aftrapper prednisolon

Lidt højt BT
 KM senere idag. Får svaret tlf om 14 dage og ses igen om 4 uger. Henv v behov.

Rp.: fik prednisolon og får MMF og Tac

dim predn 20 mg dgl
 sep noxa
 sep valcyte
 rp zelitrex
 rp selozok 50 mg x 1 dgl

[Redacted]

Standard note annual

DPR-nr. [Redacted]	Navn [Redacted]	Kontaktsvar 404119	Kontaktperiode 10.04.2014 -
Jdsagningsperiode -	Producent/Beh. - / -	Beh.kat./Notattype -	Sygehus(e) 1301

20.08.2015 09:40 B Notat **Læge** **404119** **Hæmatologisk ambulatorium 4041 1301**

Ambulant kontrol (1) år efter HSCT
 Siden sidst: (Har det glimrende.)
 Karnofsky score: 100
 Erhvervsstatus: (let nedsat pga angst. Men karnofsky 100%)
 Remissionsstatus: CR

aGVHD: 0
 Cav oris: 0
 Hud: 0
 Tarm: 0
 Lever: 0
 Lunger: 0

cGVHD: 0
 Infektion: 0
 Komplikationer: 0
 Immunosuppressiv behandling er seponeret d.: (ca feb 15),
 Immunosuppressiv behandling er ikke seponeret ()

Ses igen : 3 mdr

[Redacted] [Redacted]

How are we doing so far

The results from the first day +100 audit:

- 44% had all requested data available
- 44% had KF available
- 56% had status of remission available
- 89% had GvHD status available

The results from the first day +180 audit:

- 27% had all requested data available
- 64% had KF available
- 36% had status of remission available
- 55% had GvHD status available
- 45% had status of current or most recent work status available

The results from the second day +100 audit:

- 31% had all requested data available
- 50% had KF available
- 63% had status of remission available
- 63% had GvHD status available

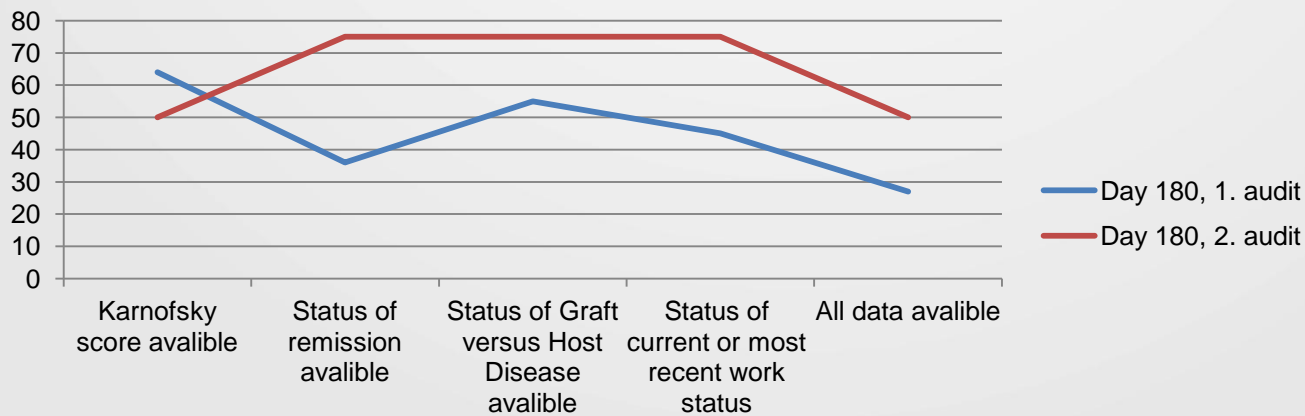
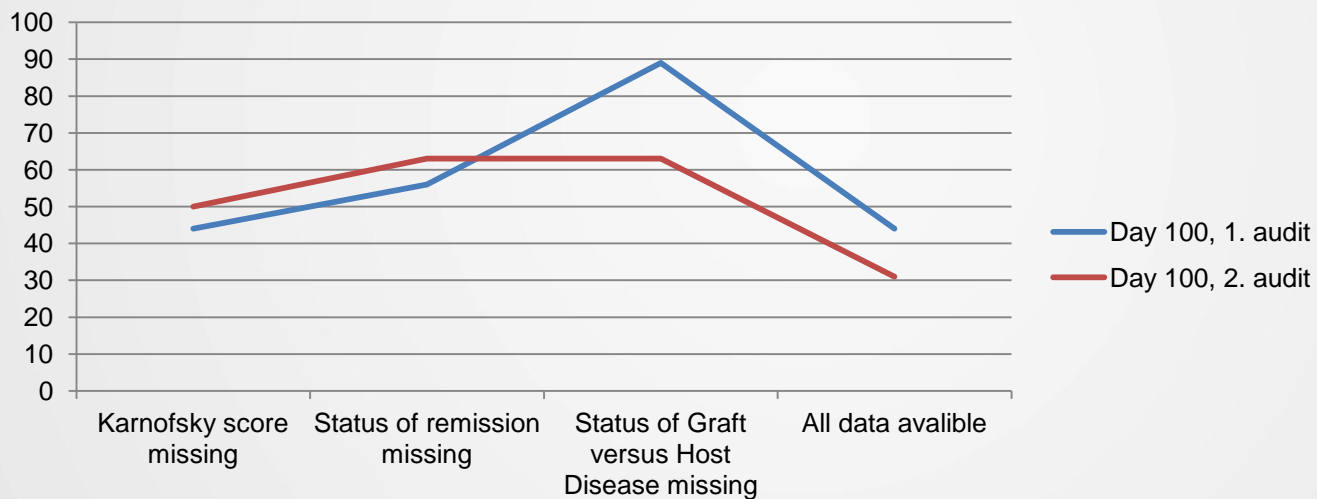
The results from the second day +180 audit:

- 50% had all requested data available
- 50% had KF available
- 75% had status of remission available
- 75% had GvHD status available
- 75% had status of current or most recent work status available

The results from the first annually visit:

- 42% had all requested data available
- 46% had KF available
- 58% had status of remission available
- 62% had GvHD status available
- 54% had status of current or most recent work status available

Comparing audit results:



Local experiences from implementing Med-A day 0

How we prepare for data collection

- Create a folder containing information with name, date of birth, diagnose, date of diagnose, date and type of transplant, donor information
- Paper copy of Med-A or Med-B and disease specific form

Collecting data starts when conditioning regime has started

- Using patient file for informations on pre transplant condition, donor and graft information and conditioning regime.
- Using referring file for information on primary disease and treatment.

How do we keep track on what to do when

Data are requested:

- EBMT – day 0, day +100 and annual
- CIBMTR – day 0, day+100, day+180 and annual
- Different CBB - various
- Local database – day 0, day +100 and annual

- Various guidelines for follow up

In order to keep track on what to do and when to do it - we created our own folder system, that is fairly straightforward and easy to use

- Three different sheets; +100, +180 and annual follow up
- Prefilled with UPN, CRID, name, date of birth, diagnose, date of transplant, data and which form due
- One folder containing the sheets; +100 and +180 follow up
- One folder containing the sheet; annual follow up
- Stored in order of month and due date

THANK YOU FOR LISTENING

Questions?

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