

Pre-congress seminar PRC / EAPC-RN

Cancer Cachexia

Florian Strasser

Cancer Cachexia: Assessment and Classification „content and assessment methodology: PRO’s“

Cancer Cachexia Framework: key „agreed-on“ features

Experiences from clinical data sets, education, trial design

Challenges to move towards consensual assessment

Patient-reported Outcomes

Next step: formal consensus on assessment

1: Fearon K & Strasser F, et al. Lancet Oncology 2011; 5th february

Cancer Cachexia Framework: key features with „agreement“

From „Anorexia/Cachexia Syndrome“ to
„Muscle loss relevant for physical function, not reversible by
nutrition, caused by decreased intake and alt. metabolism“

Domains: Muscle/(Fat)
Nutritional Intake & „Appetite“-Symptoms
Catabolic tumor, inflammation, and hormones
Neuro-muscular and emotional function

Phases reaching from early to refractory (late??) cachexia

Severity described by weight loss and BMI

Cancer Cachexia Framework¹: 16 Months later Experiences from clinical patient data collections

- . few longitudinal, full domains, standard clinical mgmt²
- . few cachexia clinics, full domains, standard clinical mgmt³
- . Specialized clinical labs⁴
- . Longitudinal, some domains, mgmt usual care⁵
- . Cross-sectional, some domains, mgmt usual care⁶

→ Muscle loss → survival
→ Nutritional intake: malnutrition or cachexia?
→ Appetite may re-considered as symptom ≠ Nintake
→ Tumorbiology (dynamics, responsiveness) important

1: Fearon K & Strasser F, et al. Lancet Oncology 2011; 5th february

2: Edinburgh-group , Montreal-group, (both completed, not fully analysed)

3: MDACC (E. DelFabro; S. Dalal); St.Gallen (not fully analysed)

4: Toronto-group (various publications)

5: Alberta-group (many publications), others

6: EPCRC-CSA-Data; other by several groups (Oslo, Rotterdam, ...)

Cancer Cachexia Framework¹: 16 Months later Experiences from Education and Guidelines

Education for oncologists and oncology nurses

- Picked-up main concepts
- different ways to assess domains
- pre-cachexia makes sense, but intervention lacking

Education for palliative care specialists

- refractory cachexia to focus on alleviation, but ...

Books

- Introduced, partially

Guideline: EPCRC-cachexia: mainly for refractory cachexia¹
ESPEN (old): not yet updated, follows 2012
Australia

Cancer Cachexia Framework¹: 16 Months later Experiences from Clinical Trials

Ongoing clinical trials

- . GTx-Phase III: muscle trial, not (really) cachexia
- . Amorelin Ph III: cachexia, global, no mgmt standards
- . ActRIIb-PhII: cachexia, OAS \geq 4mts, not refractory
phys. Fct. (Borg \geq 4), NI $>$ 20kcal/ $>$ 0.6Pr/kg
- . Lena/cach: refractory, inflamm. Cachexia

....

Planned clinical trials pre-MENAC: pre-/cachexia, new IV
domain-“specific“

Endpoints: all combined muscle mass & function
? Food intake, symptoms?

Challenges to move towards consensual assessment

Phases: Biology of cachexia versus Severity

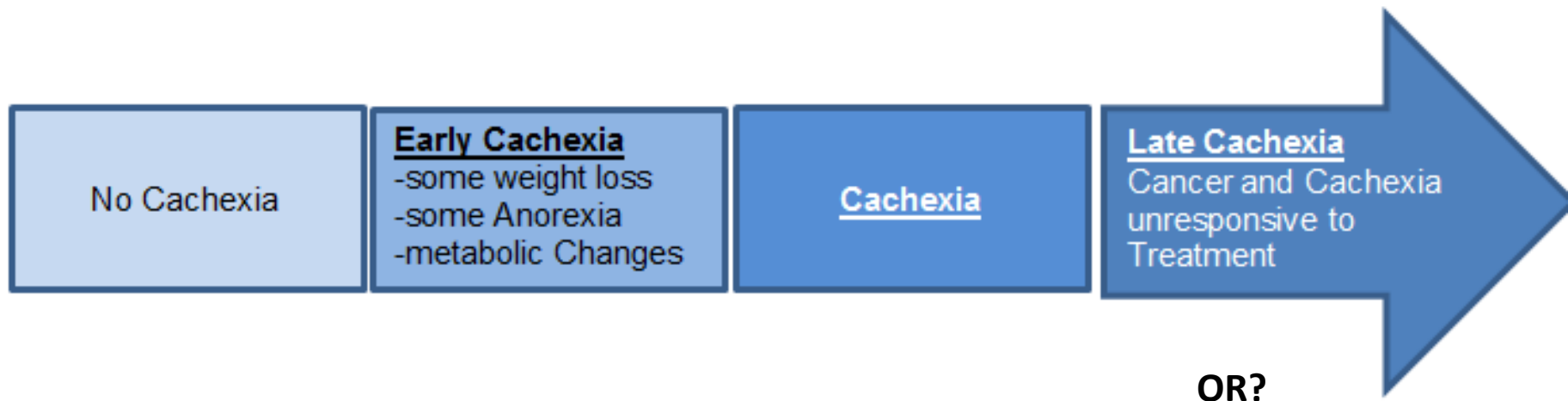
Biological driven
Tumor not responsive
and/or catabolic active

„late“ cachexia
Prognosis < 3 mts
„severe“ cachexia

*Pat. 43j, Pancreas-ca, Adeno, liver mets,
Bili 36; 4 mts 8% WL, BMI 22; CRP 82*

*Pat. 53, SCC-HN, refuses chemoth, last tx >2j, WL 18%, 6 mts,
BMI 19, incident pain, PS 3, CRP 2, god waits, family ready*

→ Which variables drive clinical judgment?



Refractory
cachexia

Cancer disease: pro-catabolic and not
responsive to anticancer treatment.
Low performance score.
<3 months expected survival

Challenges to move towards consensual assessment

Domains: Clinical Mgmt Standards vs Domains

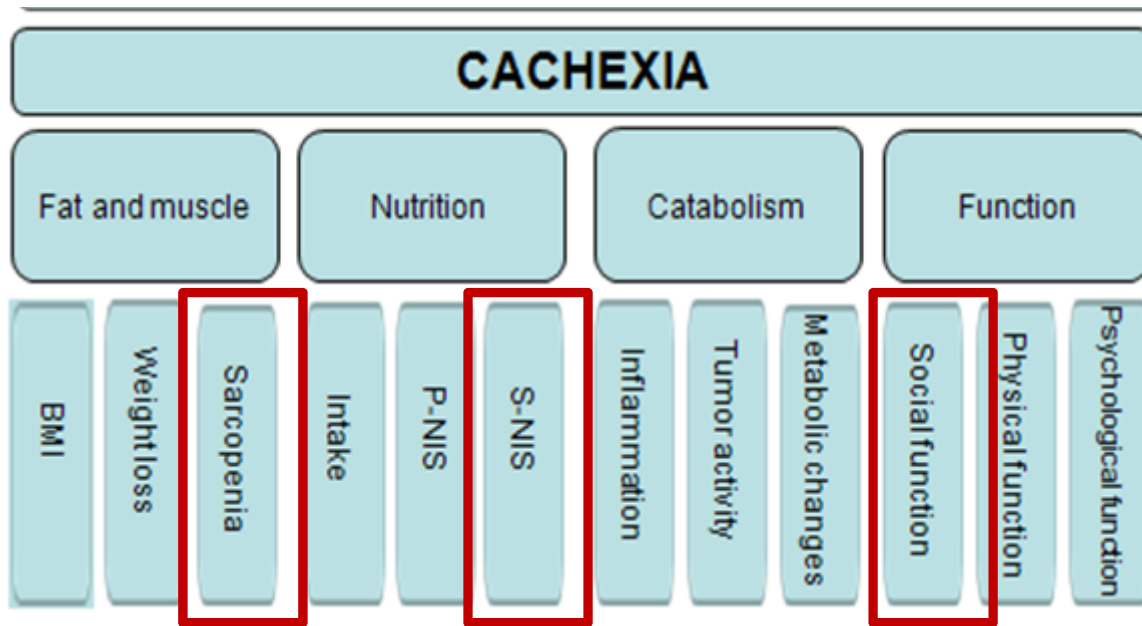
Clinical Mgmt standards
Settings of care
S-NIS / Co-morbidities

Various domains „found“ in
same patient, including
different biologies

*Pat. 53, SCC-HN, refuses chemoth, last tx >2j, WL 18%, 6 mts,
BMI 19, incident pain, PS 3, CRP 2, god waits, family ready*

- Is a domain – description approach helpful to guide mgmt?
- Can symptom clusters and collections of variables guide?

*Vrgl. Pat. bone met lumbal, plexus infiltration left leg, drug addict,
existential suffering, anxiety, infection-delir, venous puncture hurts*



S-NIS:
SECONDARY
 nutrition impact
 symptoms:
 Complications of
 cancer / treatment
 ≠ cachexia

Diagnosing Cancer Cachexia

Screening: Weight loss, BMI, Appetite & Fatigue)

Rule out: Secondary nutrition-impact symptoms

Cachexie "Staging" SIPP

Storage <i>kg, edema⁺</i>	Weight loss: compared to usual weight, duration, fluid retention/obesity
Intake <i>%kcal/EW</i>	Anorexia, early satiety, chemosensory % normal intake, 1-2 day dietary record,
Potential <i>Dynamics, CRP</i>	Tumor [catabolic] activity, Prognosis C-reactive protein
Performance <i>KPS, Grip, ERD</i>	Physical functioning, muscle strenght Psychosocial conseqens. & motivation

OR?

Function:
 Phenomenology of
 the biology **NOT**
impact

Challenges to move towards consensual assessment

Domains: Riskfactors for difficult mgmt versus impact

Physical and/or emotional
function decreased
Co-morbidities (wheelchair)

Impact of cachexia on
physical functioning, on
emotions, social role

*Pat. 72, RCC, mediastinal, kidney, CRP 210, WL 14.5% / 4 mts,
refractory to chemo (3 lines), PS 2, active physical, motivated*

→ Is the domain „Potential“ and indicator of (un-) responsiveness of cachexia to multimodal treatment?

→ Impact of the syndrome on various function ≠ same!

Patient-reported Outcomes

→ Is it possible to ask EVERYTHING PATIENT?

Muscle & Fat Perceived weight loss: not bad by pat.
perceived muscle mass if edema..

Perceived nutritional intake - not same as appetite
- not equal: measured

Catabolic drive Inflammation symptoms
Tumor-resistance related symptoms (??)

Performance Ability of patient to perform physical activ.
Patient conscious control of eating, moving

Refractory Cancer Cachexia

Biology of cancer and associated catabolism
(is part of definition of cachexia)

Time left to achieve outcomes (muscle, function) too short
(self-fulfilling prophecy in severe malnutrition)

Other care priorities: no performance physical & emotional

Assessment: next steps

Consensus of clinical & academic experts needed

- Agreements Principles of framework (Performance?)
Basic/Screening – Clinical Priority - Research
Secondary-NIS: are NOT cachexia
- Domains are from the framework (no new domains)
- Assessments those used in data collections / trials
no new SLR's of all possible domains
- Consensus formal Delphi, Levels A/B/C
Experts: defined (clinical >30%, published)
. as 2009-2011; new persons
- Results Clinical flow recommendation
Management of S-NIS, before diagnosis
Tool: setting, limits, time frames; validate

7.2012 – 12.2012 ?