Management of the elderly with advanced CKD

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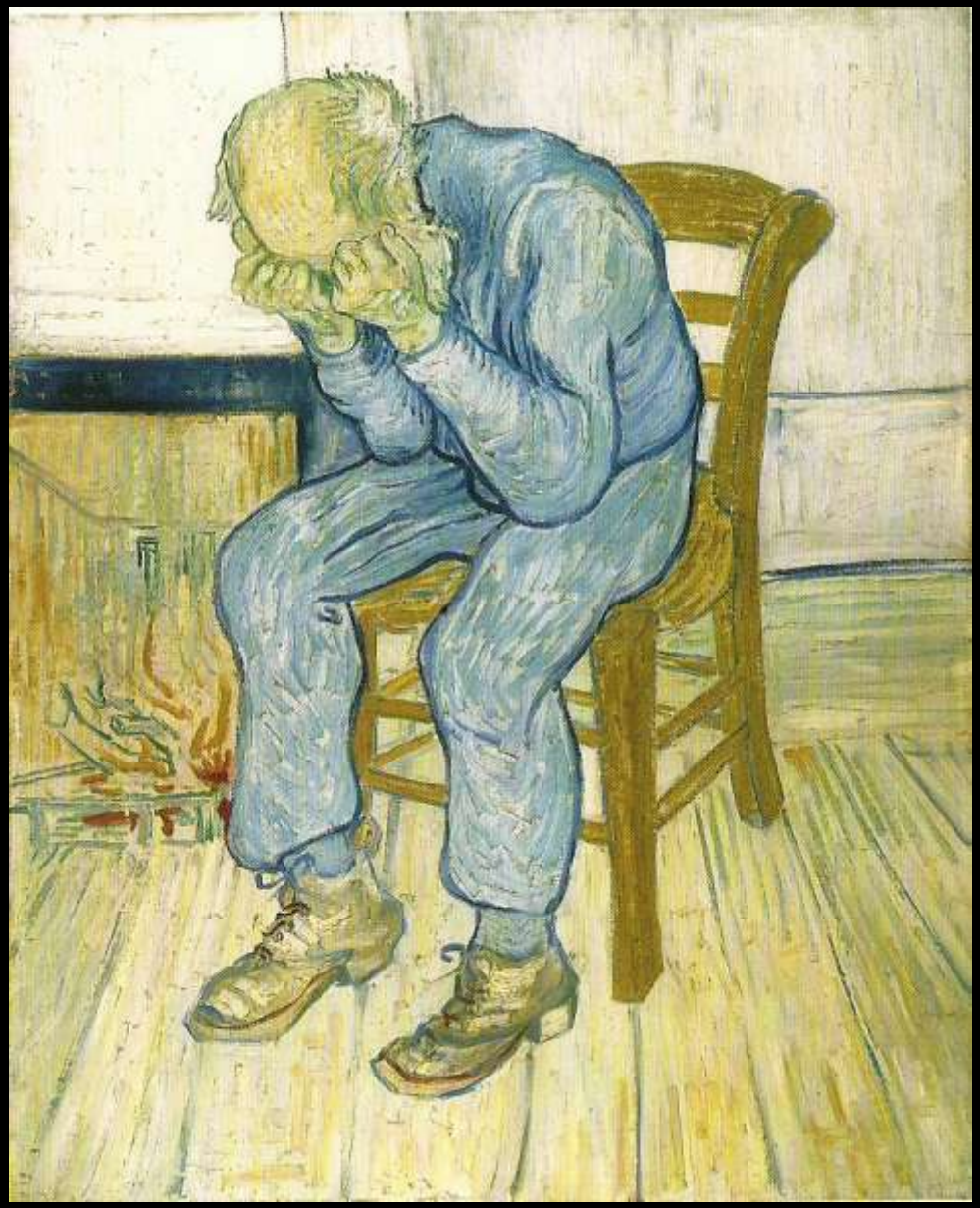
Rembrandt: Portrait of an Old Man in Red



Sorrowing Old Man (‘At Eternity’s Gates’) by van Gogh

ERBP guideline

- Scoping meeting Nov 13 – nephrologists and geriatricians
- ‘Screening of frail and older patients and referral between disciplines’ ranked highest
  - Geriatricians: assessment of frailty, rehabilitation, management of multimorbidity
  - Nephrologists: assessment of kidney function, RRT or not, management renal complications
  - Both: supportive care, withholding or withdrawal of dialysis; symptom control

The King's Fund

Ideas that change health care

Making our health and care systems fit for an ageing population

Authors
David Oliver
Catherine Foot
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Published 2014 by The King's Fund

Components of care for older people

Components of care all relate to advanced kidney disease

- Live well with 1 or more long-term conditions
- Support for complex co-morbidities and frailty
- Accessible effective support in crisis
- High quality person-centred acute care
- Good discharge planning and post-discharge support
- Effective rehabilitation and re-ablement
- Person-centred dignified long-term care
- Support, control and choice at end of life

Learning outcomes for session

- Concept of frailty
- Assessment of frailty
- Impact of frailty on patient outcomes and prognosis
- Dialysis or no dialysis?
- Symptom recognition and management
- Recognising end of life
- Advance care planning

What is frailty?

- Decreased physiologic reserves or dysregulation of multiple physiologic systems – associated with age and/or chronic illness
- Presents as composite of poor physical function, exhaustion, low physical activity and weight loss
- Associated with higher risk of falls, cognitive impairment, hospitalization and death
- More common in CKD than general population

Common clinical presentations of frailty

- **Non-specific:** extreme fatigue, unexplained weight loss and frequent infections
- **Falls:** balance and gait impairment important risk factors and are major features of frailty
- **Delirium:** rapid onset of fluctuating confusion when admitted to hospital. Associated with adverse outcomes
- **Fluctuating disability:** day to day instability resulting in good and bad days

Assessing frailty: should be routine nephrological care for older patients

- **History**:
  - daily activities of patient
  - how much help with these?
  - any change in physical activity?
  - any weight loss?
  - any falls?
- **Examination:**
  - walking speed into clinic and use of aids
  - muscle mass and strength
  - obvious weight loss

Canadian Study of Health and Aging Frailty Scale (Rockwood et al, CMAJ 2005)

Score	Definition
1	***Very fit*** – robust, active, energetic, well-motivated and fit
2	***Well*** – no active disease, but less fit than people in category 1
3	***Well, with treated comorbid disease*** - disease symptoms are well controlled compared with category 4
4	***Apparently vulnerable*** – although not frankly dependent, commonly complain of being "slowed up"
5	***Mildly frail*** – with limited dependence on others for instrumental activities of daily living
6	***Moderately frail*** – help is needed with both instrumental and non-instrumental activities of daily living
7	***Severely frail*** – completely dependent on others for the activities of daily living, or terminally ill

Canadian Study of Health and Aging Frailty Scale (Rockwood et al, CMAJ 2005)

Score	Definition
8	***Very severely frail –*** completely dependent, approaching end of life. Typically, would not recover from even minor illness
9	***Terminally ill*** – approaching end of life with life expectancy <6 months, but not otherwise evidently frail

Frailty associated with dementia

- Degree of frailty usually corresponds to degree of dementia
  - **Mild dementia:** forgetting details of recent event, repeating same question/story, and social withdrawal
  - **Moderate dementia:** recent memory very impaired but remembers past events; can do personal care with prompting
  - **Severe dementia:** cannot do personal care without help

Geriatric assessment and follow-up for patients identified as frail

- **Comprehensive geriatric assessment:** formal evaluation of patients using a 'geriatric lens'.
- Conducted over several visits, in home and clinic, by multiprofessional team including nursing, physiotherapy, occupational therapy and social work
- Subsequent support has been shown to reduce hospital admissions, falls and moves into long-term care

Elements of comprehensive geriatric assessment

Medical assessment	Problem list (include vision, hearing..) Co-morbid conditions and disease severity Medication review Nutrition status
Functional assessment	Basic activities daily living Instrumental activities daily living Activity / exercise status Gait and balance

Elements of comprehensive geriatric assessment

Psychological assessment	Cognitive function testing Mood / depression
Social assessment	Informal support needs and assets
Environmental assessment	Care resource eligibility / financial assessment Home safety Transportation needs

Cognitive Function

- Do not rely on simple conversation – can hide significant cognitive dysfunction
- Cognitive impairment in CKD mostly related to vascular disease and affects executive function
- Simple memory tests, including MMSE, often normal
- Executive function tests include clock drawing (easy to do in clinic), Trail Making Tests, MOCA

Key management principles for frailty

- Promote exercise – improves outcomes and functional ability
- Falls prevention
- Diagnosis of and support for dementia
  - Reduce antipsychotic prescribing
  - Training, education and support for carers
- Reduce inappropriate polypharmacy

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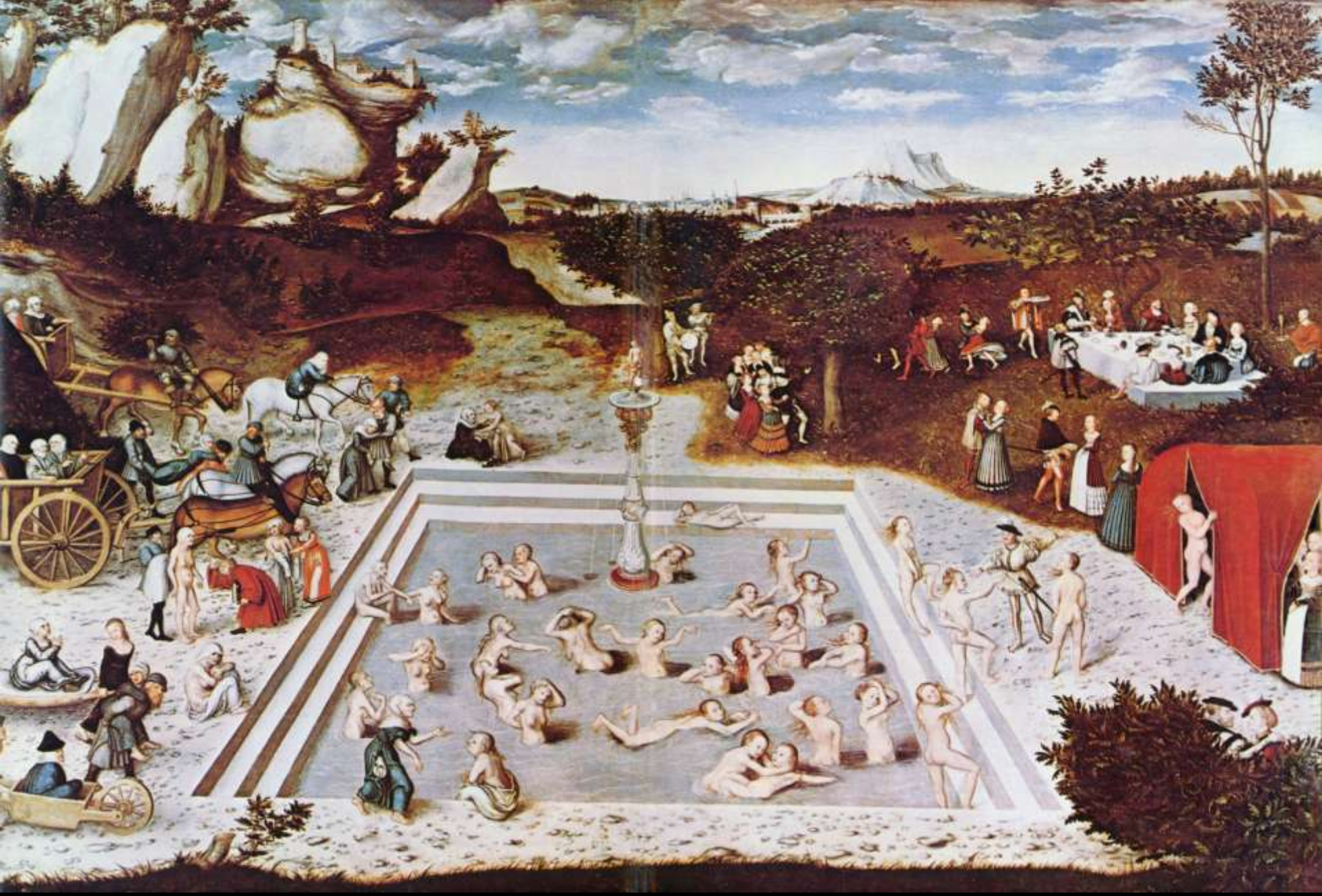
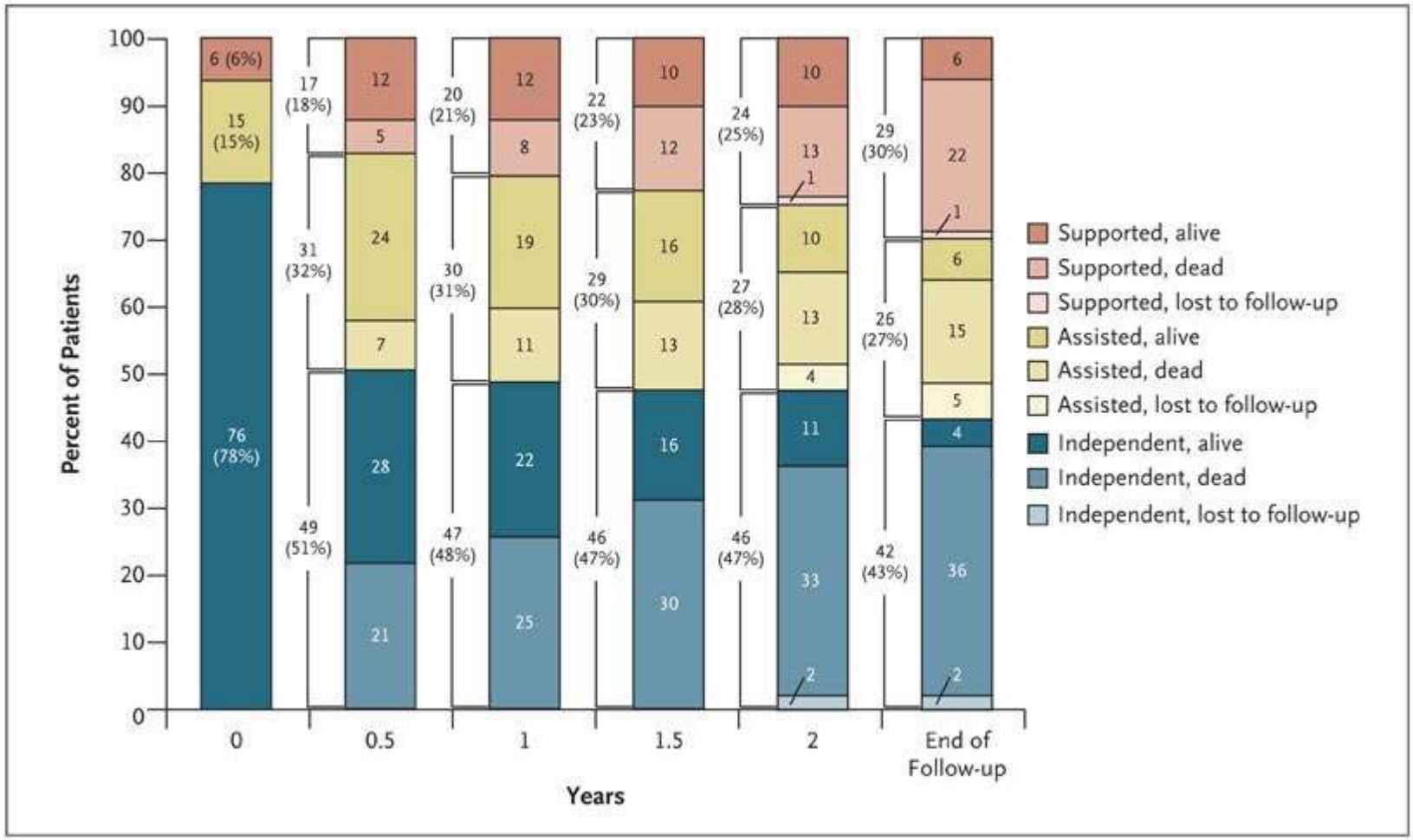


Cranach: Fountain of Youth

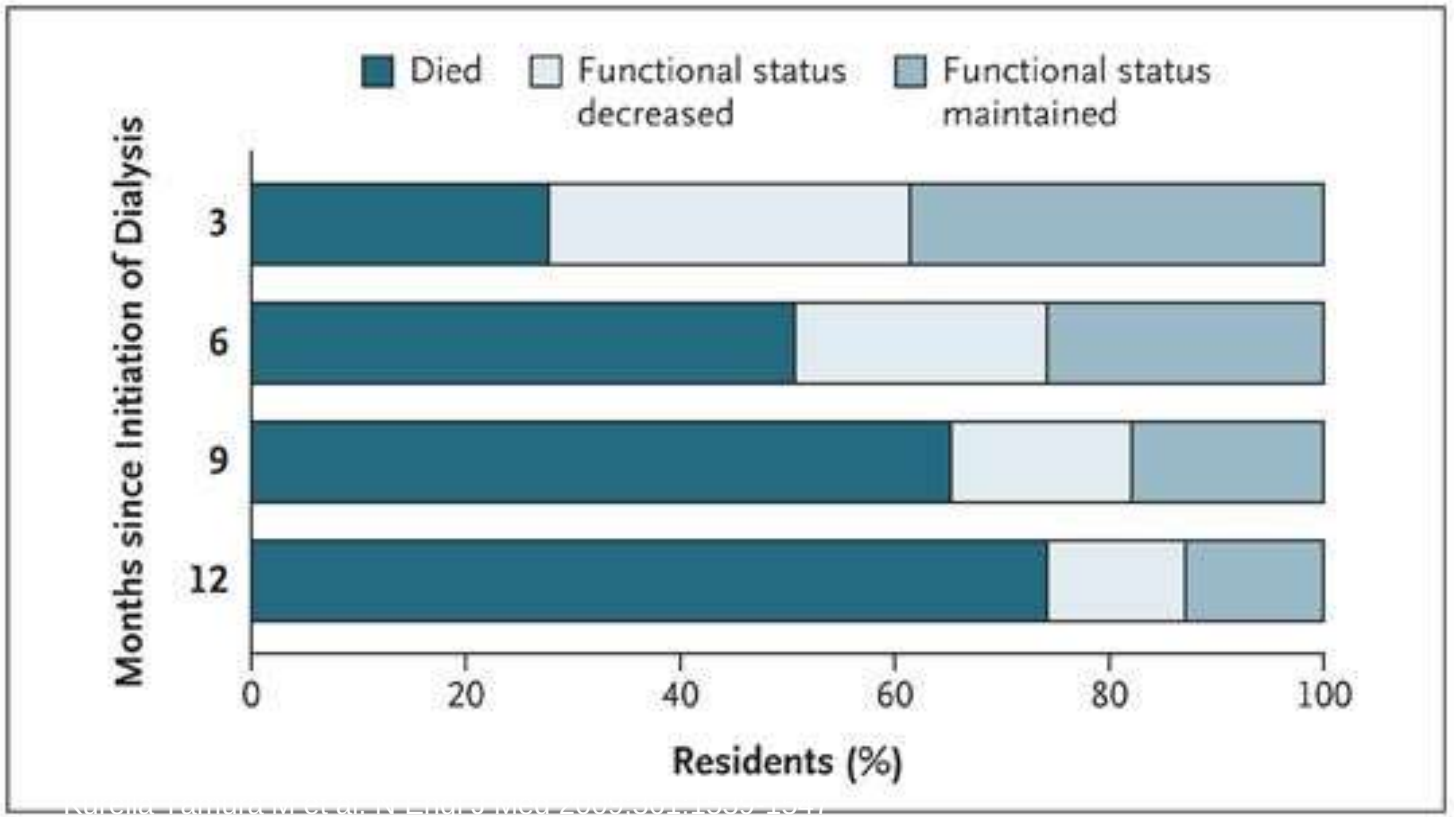
Living Status and Residence in 97 patients >80 yrs Assessed at 6-Month Intervals



Jassal S et al. N Engl J Med 2009

The NEW ENGLAND JOURNAL of MEDICINE

Change in Functional Status after Initiation of Dialysis: 3700 nursing home residents



Kurella Tamura M et al. N Engl J Med 2009

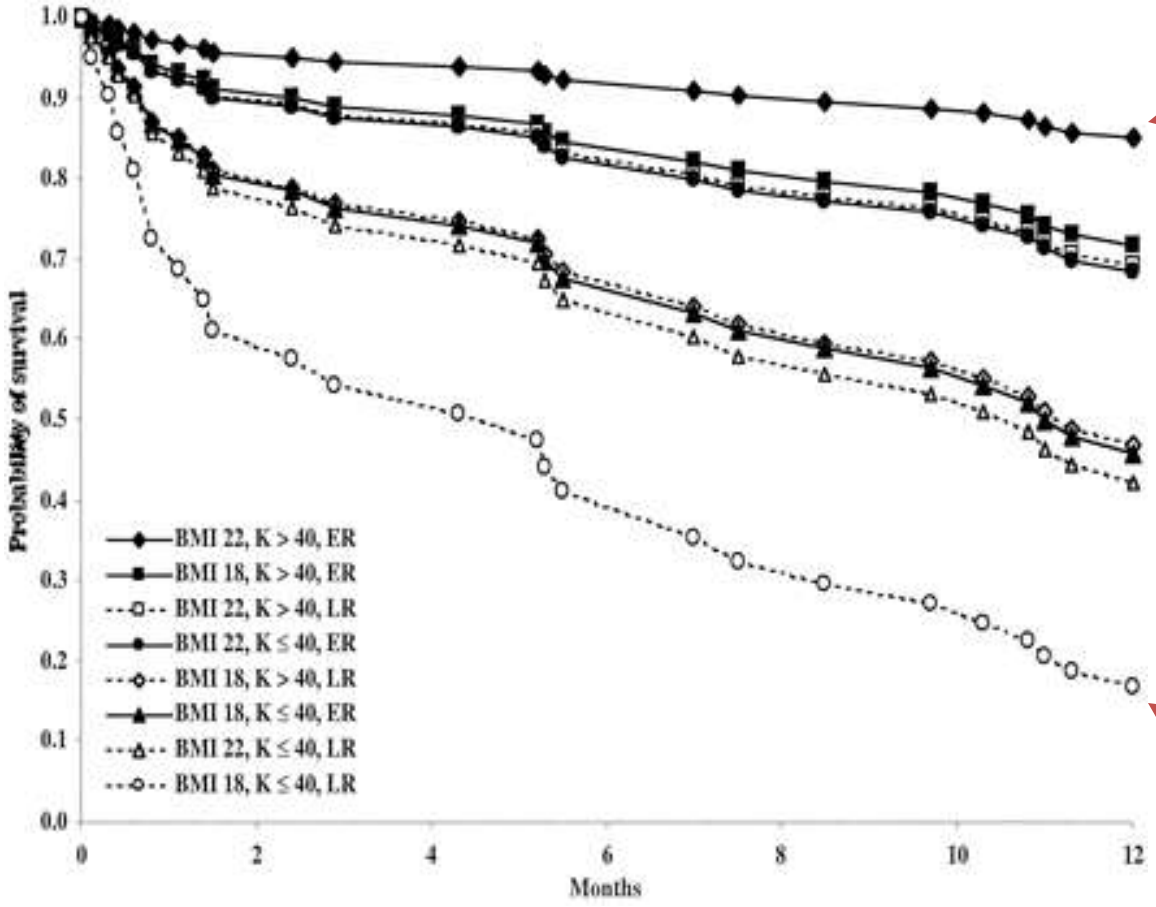
The NEW ENGLAND JOURNAL of MEDICINE

FEPOD: Frailty is predictor of outcomes and dialysis modality (aPD cf HD)

Multiplicity Adjusted P value	Age	Gender	Dialysis vintage	MMSE	Stoke co-morbidity score	Frailty score	Dialysis modality
SF12 total	0.9	0.9	0.9	0.9	0.62	**0.022**	1.00
SF12 PCS	0.9	0.80	0.82	0.78	0.80	**0.002**	0.9
SF12 MCS	0.9	0.9	0.83	0.9	0.83	0.17	0.93
Illness Intrusion	0.14	0.72	0.84	0.89	0.42	0.39	0.97
Symptom score	0.9	0.92	0.84	0.51	0.56	0.26	0.15
HADS score	0.39	0.93	0.92	0.72	0.78	0.44	0.24
Barthel score	0.9	0.96	0.84	0.83	0.64	**0.003**	0.840
Timed Up and Go	**0.013**	0.70	0.15	0.25	**0.009**	**0.003**	0.72

Brown EA et al: submitted for publication

Survival of octogenarians on HD dependent on BMI, Karnofsky score and early or late referral



BMI 22
Karnofsky>40
Early referral

BMI 18
Karnofsky<40
Late referral

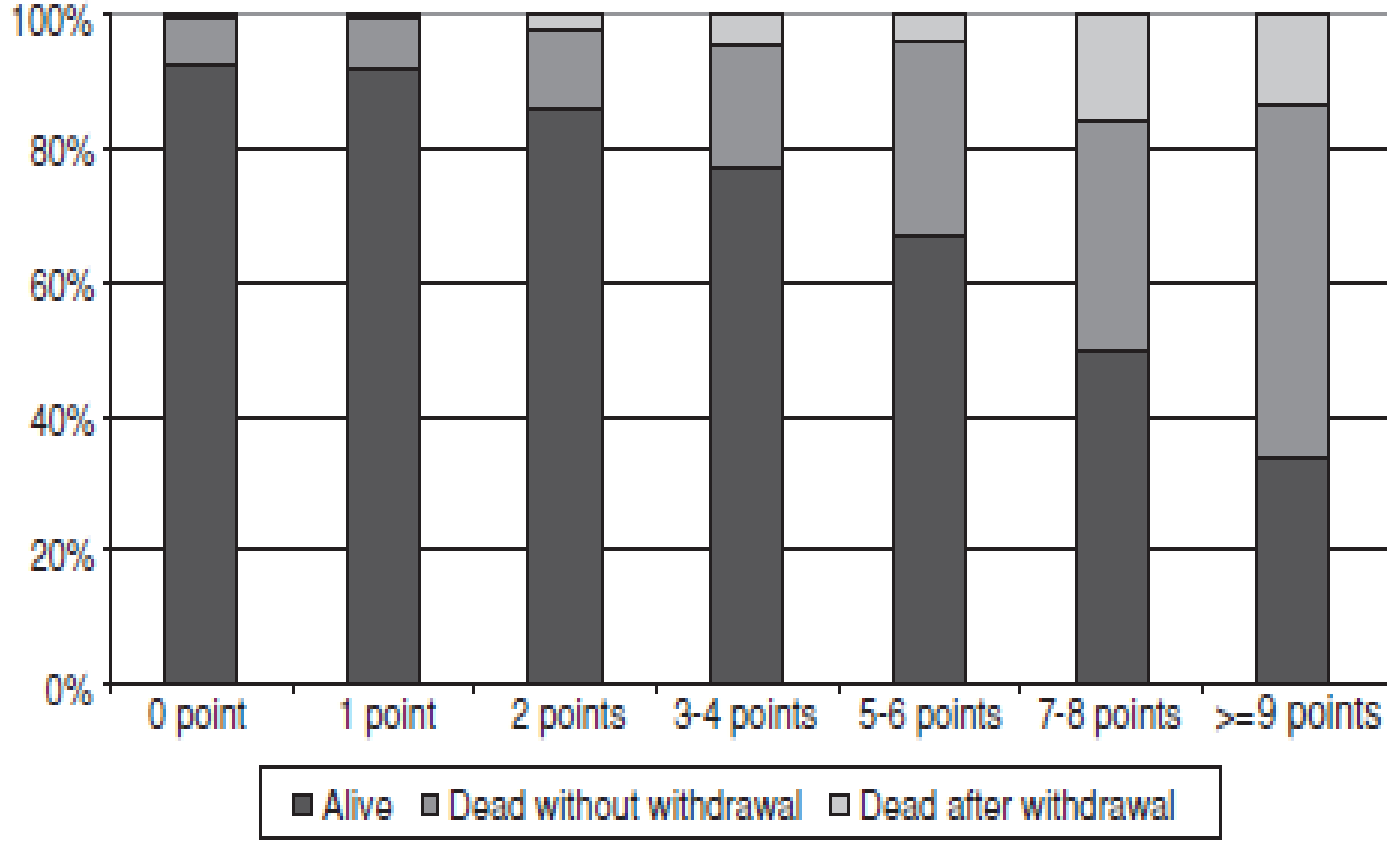
Joly et al, JASN 2003

Clinical score to predict 6 month prognosis in patients ≥75 yrs; French Rein Registry

- Body mass index <18.5 kg/m^2 (1 point)
- Congestive heart failure stages III-IV (2 points)
- Peripheral vascular disease stages III-IV (2 points)
- Dysrhythmia (1 point)
- Active malignancy (1 point)
- Severe behavioural disorder (2 points)
- Total dependency for transfers (3 points)
- Unplanned dialysis (2 points)

Couchoud et al, NDT 2009

Death and withdrawal from dialysis after 6 months by point score



Couchoud et al, NDT 2009

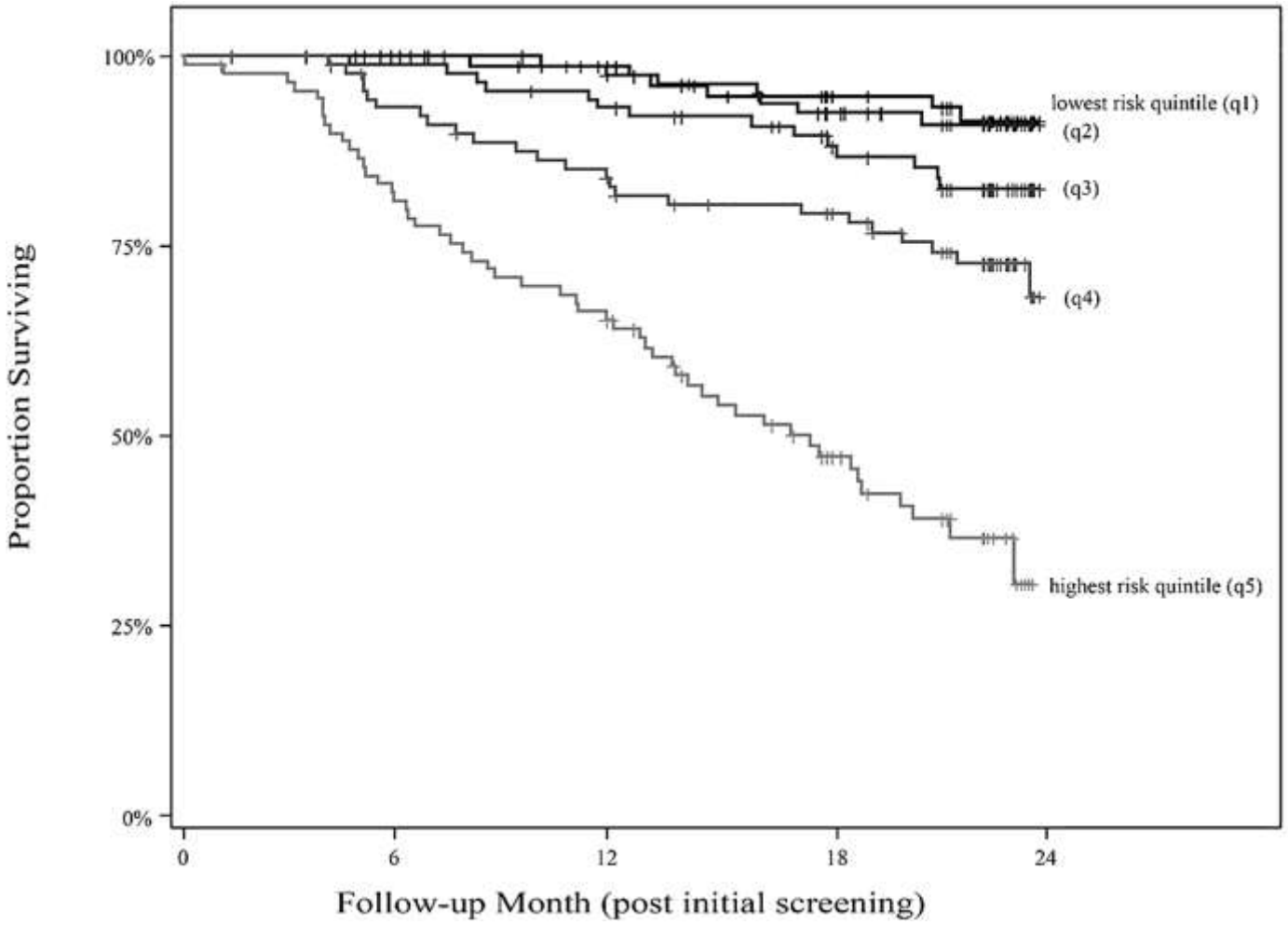
Predicting Six-Month Mortality for Patients Who Are on Maintenance Hemodialysis

Lewis M. Cohen,* Robin Ruthazer,† Alvin H. Moss,‡ and Michael J. Germain§

Clin J Am Soc Nephrol 5: 72–79, 2010

- Prognostic model for 6 month question using:
  - Surprise question
  - Age
  - Plasma albumin
  - Dementia
  - Peripheral vascular disease

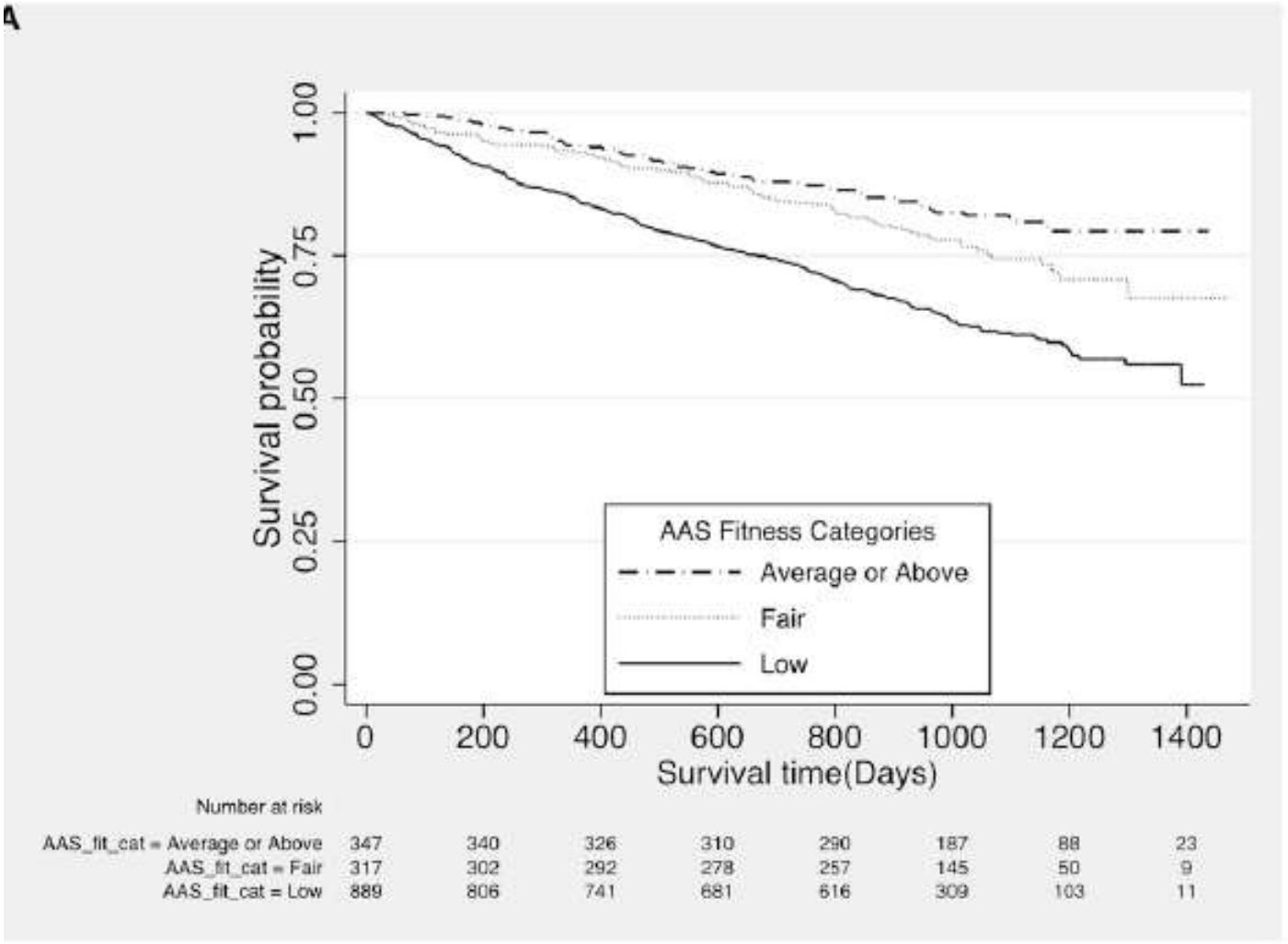
Survival across quintiles of predicted risk



Cohen, L. M. et al. Clin J Am Soc Nephrol 2010;5:72-79

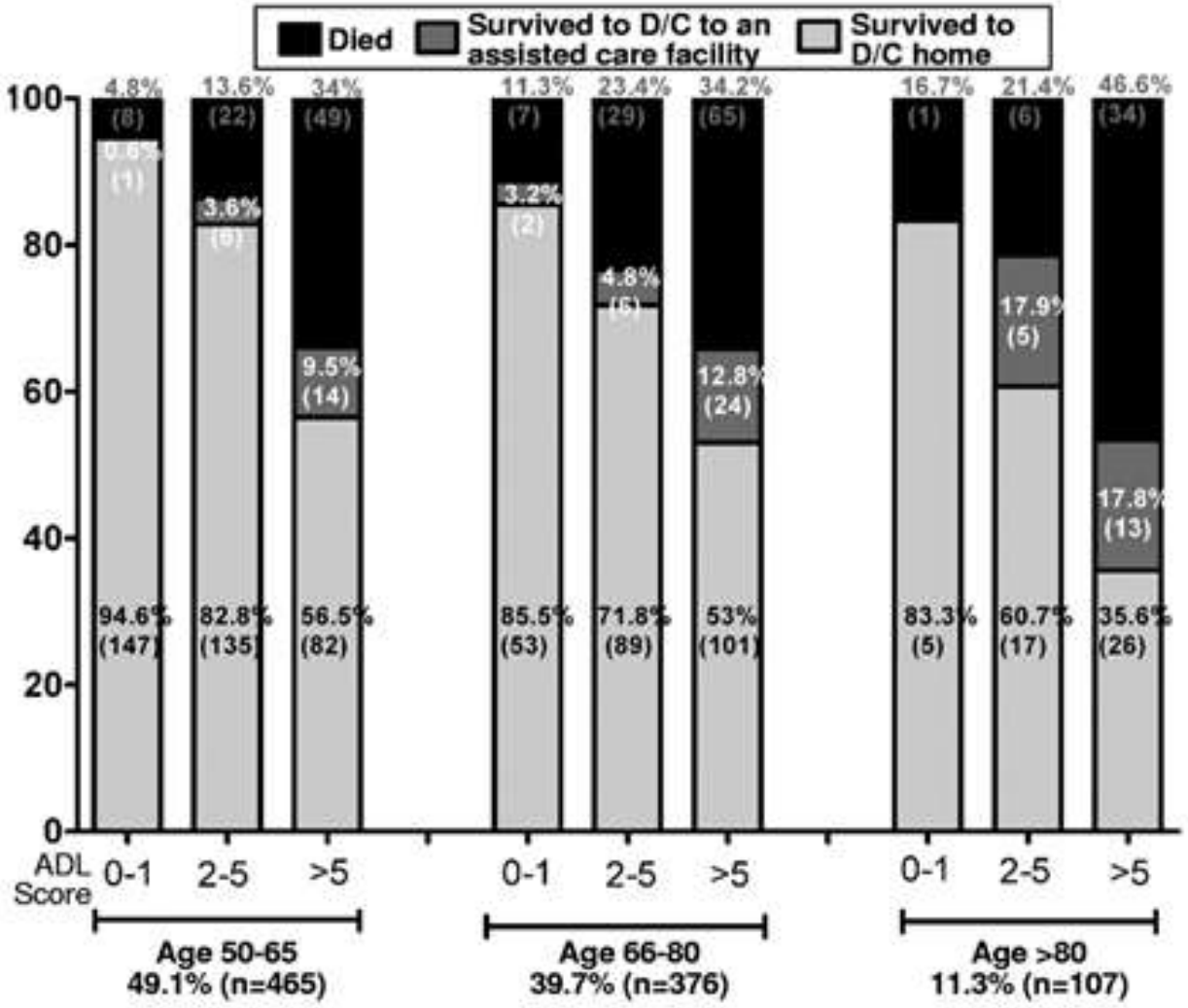
CJASN

Survival related to physical activity in patients starting on dialysis



Johansen et al. CJASN 2013

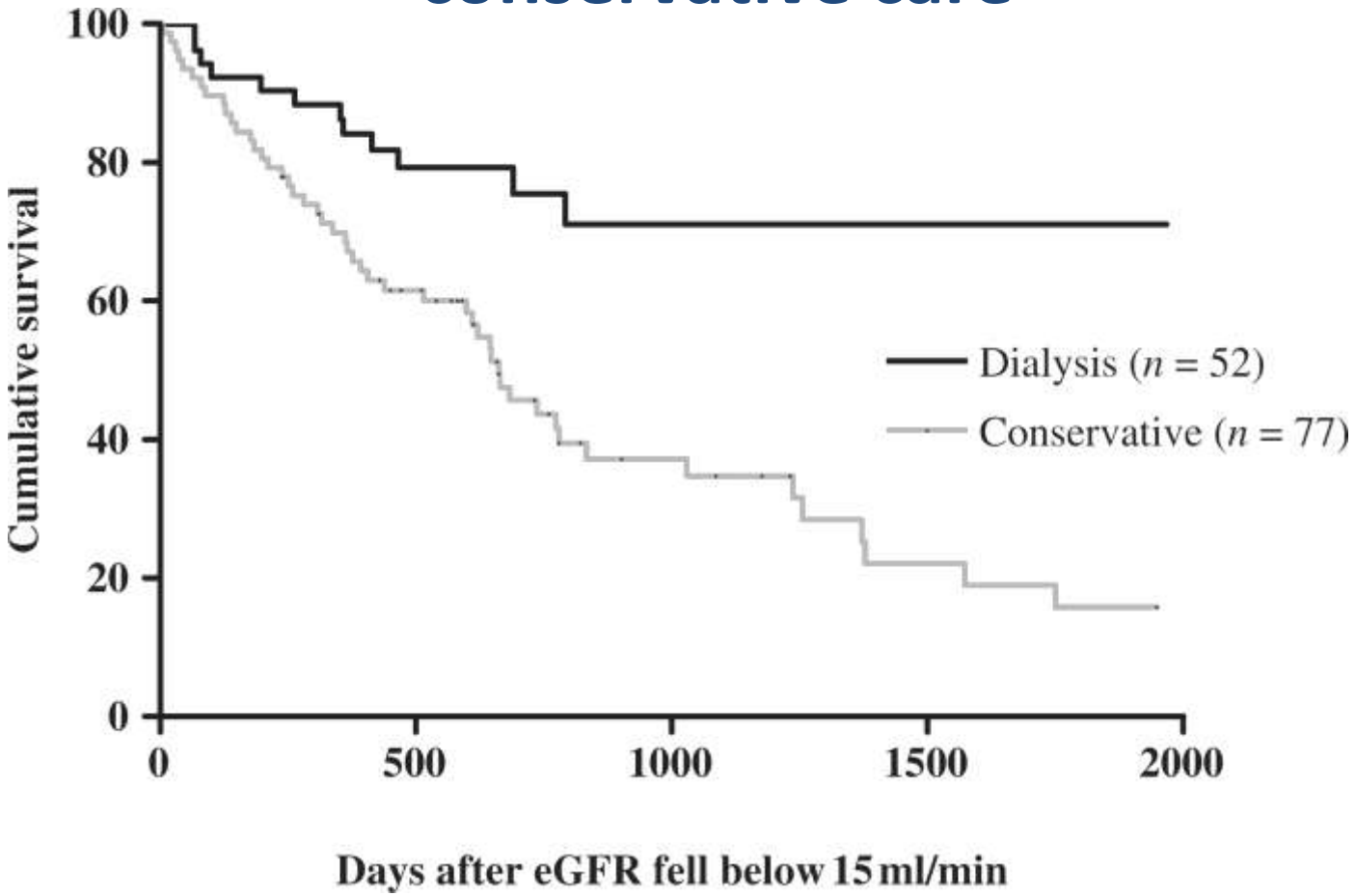
Admission ADL score predicts death in hospital and discharge to assisted care facility in dialysis patients



Sood et al, AJKD 2011

Dialysis or no dialysis?

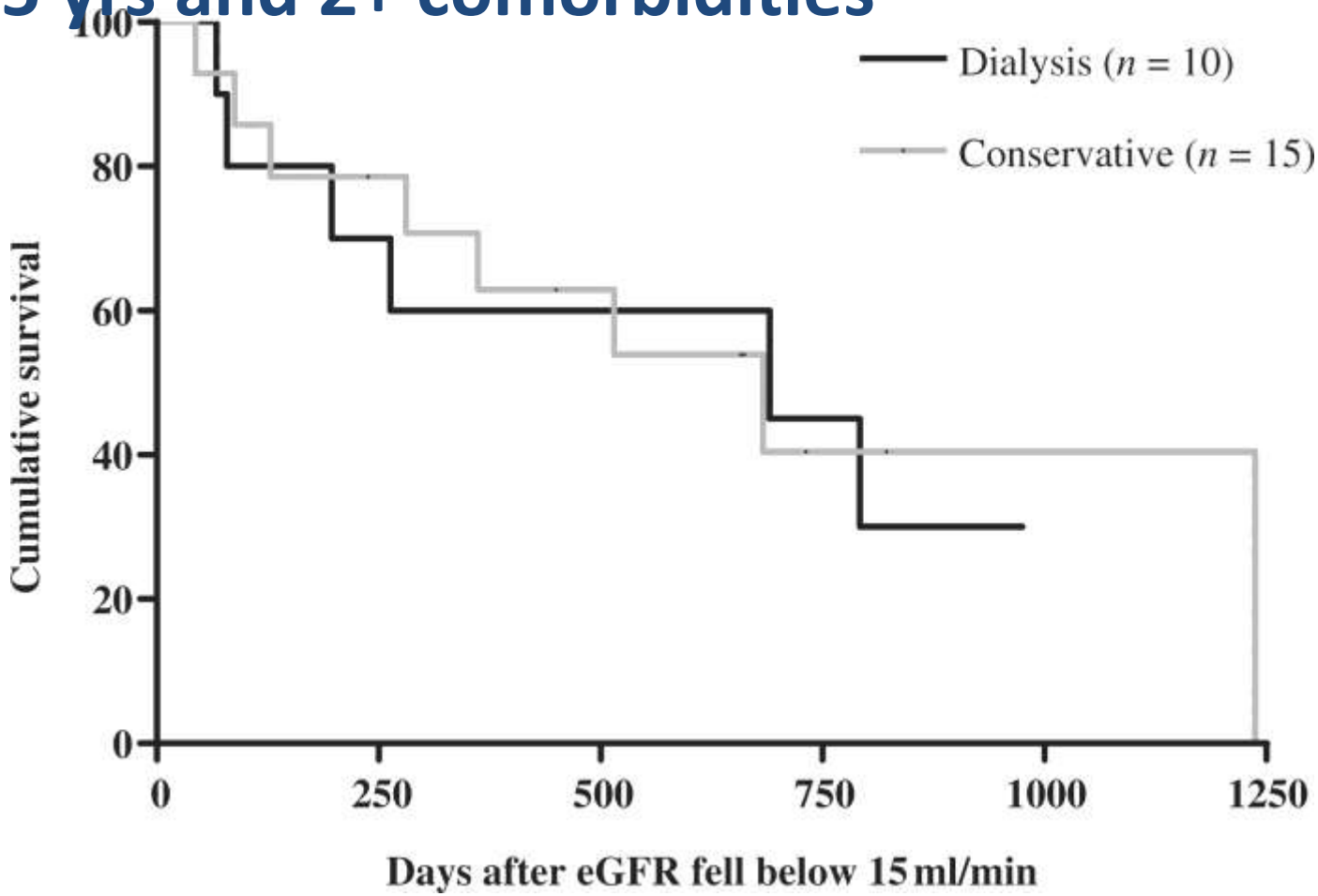
Survival of patients > 75 years old on dialysis or conservative care



Murtagh, F. E. M. et al. Nephrol. Dial. Transplant. 2007 22:1955-1962; doi:10.1093/ndt/gfm153

Nephrology Dialysis Transplantation

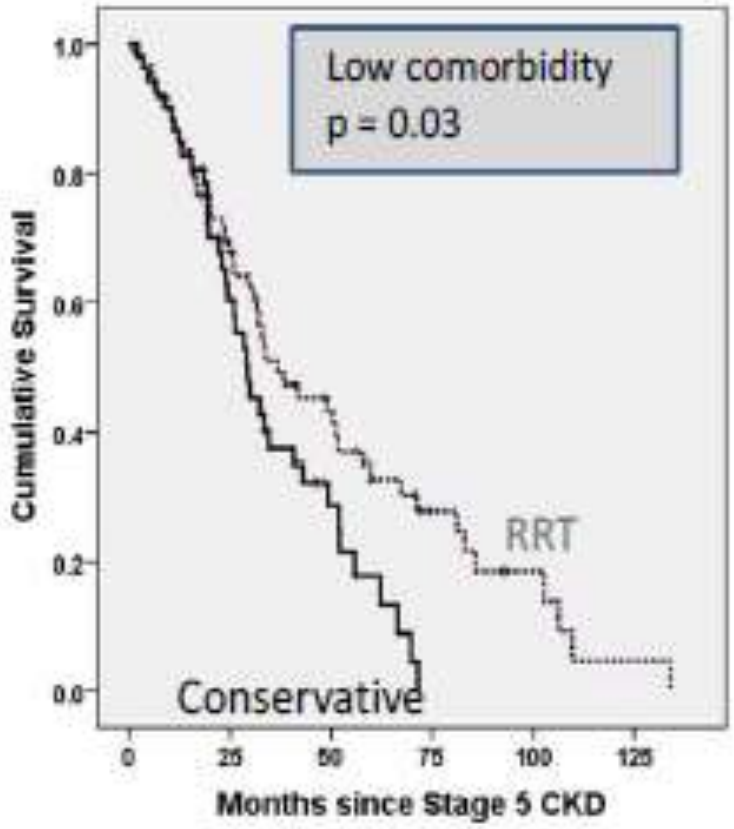
Survival on dialysis or conservative care if > 75 yrs and 2+ comorbidities

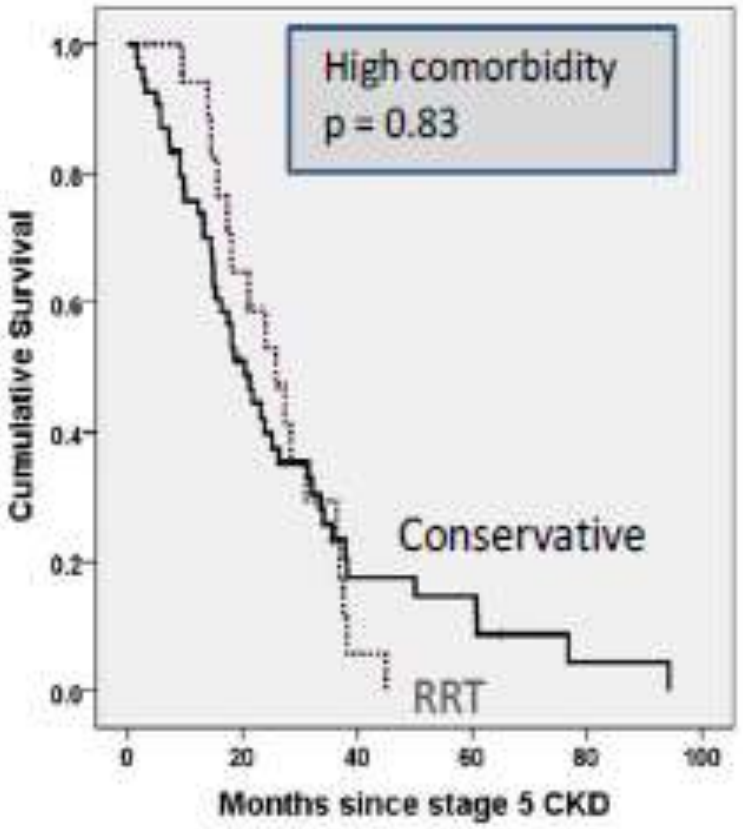


Murtagh, F. E. M. et al. Nephrol. Dial. Transplant. 2007 22:1955-1962; doi:10.1093/ndt/gfm153

Nephrology Dialysis Transplantation

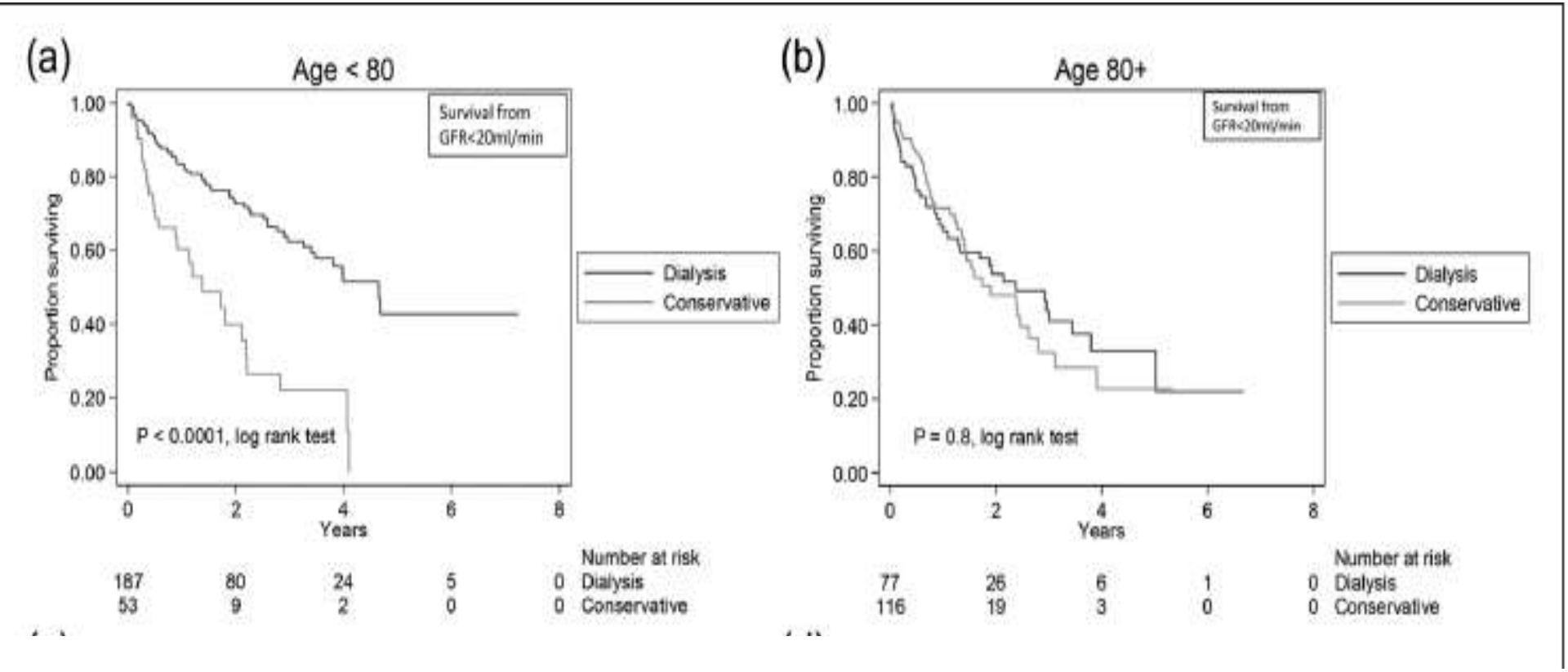
Survival in patients >75 years old on RRT and conservative management related to comorbidity





Chandna et al. NDT (2011)

Survival from eGFR 20ml/min on Conservative Management cf Dialysis for age <80 and 80+



Hussain et al, Palliative Medicine 2013

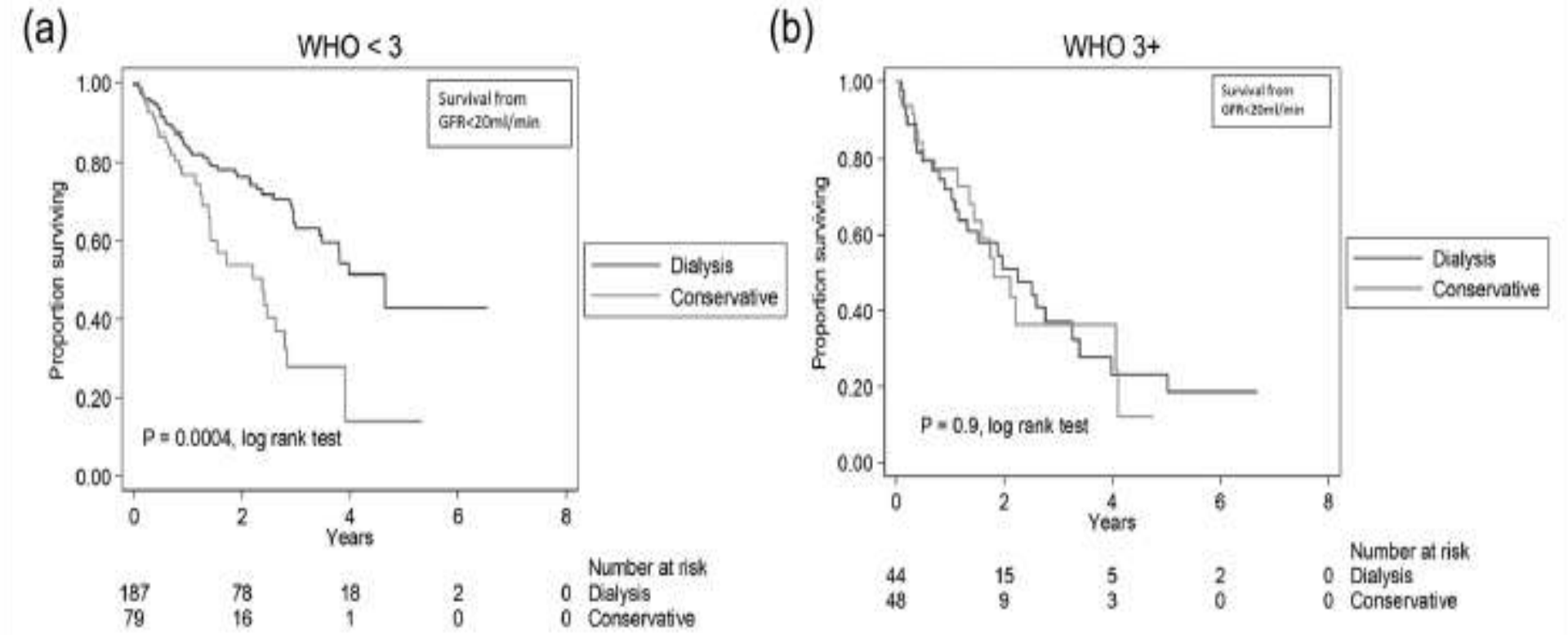
Survival from eGFR 20ml/min on Conservative Management cf Dialysis for WHO performance status <3 and 3+

Hussain et al, Palliative Medicine 2013

WHO performance status

Grade	Explanation of activity
0	Fully active, able to carry on all pre-disease performance without restriction
1	Restricted in physically strenuous activity but ambulatory and able to carry out work of a light or sedentary nature, e.g., light house work, office work
2	Ambulatory and capable of all selfcare but unable to carry out any work activities. Up and about more than 50% of waking hours
3	Capable of only limited selfcare, confined to bed or chair more than 50% of waking hours
4	Completely disabled. Cannot carry on any selfcare. Totally confined to bed or chair
5	Dead

Survival from eGFR 20ml/min on Conservative Management cf Dialysis for WHO performance status <3 and 3+



Hussain et al, Palliative Medicine 2013

CLINICAL COMMENTARY www.jasn.org

A Patient-Centered Vision of Care for ESRD: Dialysis as a Bridging Treatment or as a Final Destination?

Stefaan J. Vandecasteele* and Manjula Kurella Tamura[†‡]

*Division of Nephrology and Infectious Diseases, AZ Sint-Jan Brugge-Oostende, Bruges, Belgium; [†]Geriatric Research and Education Clinical Center, Veterans Affairs Palo Alto, Palo Alto, California; and [‡]Division of Nephrology, Stanford University School of Medicine, Palo Alto, California

J Am Soc Nephrol 25: ●●●–●●●, 2014. doi: 10.1681/ASN.2013101082

Treatment goals for patient-centred care when "Dialysis as Final Destination"

Cure possible	No
Patient preferences	Maximise quality of life +/- longevity
Aims of treatment	Treat complications Prevent short-term complications Sustain private-life functioning
Medical supportive interventions	Minimal necessary blood tests Minimise pill burden – mostly for symptom control and to prevent short term complications
Pain and symptoms	Proactive and regular screening
Holistic support	Promote self-care with nursing support; support to care-givers; psychological support; promote physical rehabilitation

Vandecasteele & Tamura, JASN 2014

Choice of dialysis modality

- No difference in survival on HD compared to PD
- Decision should therefore be made with patient dependent on patient goals, lifestyle and medical concerns
- Availability of assistance enables older patients to have dialysis at home – assisted PD considered first line treatment for older frail patients in France

Need for patient-centred care

- What matters to patient?
  - Travel?
  - Caring for spouse?
  - Grandchildren care?
  - Length of life or quality of life?
  - End of life priorities?

HD or PD in elderly: patient perspective

HD or PD in elderly: patient perspective

HAEMODIALYSIS

- Hospital based treatment
  - Not dependent on patient ability
  - Can provide social structure for frail elderly
  - Transport (journey and waiting time) needs to be added into treatment time
  - Often feel washed out for hours after HD session
- Interferes with social and family life
- Increased hospitalisation for vascular access problems
- Difficult to travel for holidays or visiting family

PERITONEAL DIALYSIS

- Home based treatment
  - Patient independence
  - Fits in with work and social activities
  - Can be done by carer (paid assistant or family)
- Less visits to hospital
- Flexibility of manual exchanges (3-4/day) or automated cycling machine over night
- Treatment burden related to daily and repetitive nature of performing exchanges
- Easier to travel to go on holiday or visit family nationally or overseas

HD or PD in elderly: doctor perspective

HD or PD in elderly: doctor perspective

HAEMODIALYSIS

- Familiar with HD; complications regarded as part of treatment
- Well-established pathways so easy to organise
- May be paid more for HD
- Very few medical contraindications so less need to assess patient for medical and psycho-social eligibility
- Many older patients find it difficult to make decisions and too many barriers to education so takes less time just to put patient on to HD – or keep patient on HD if presenting acutely

PERITONEAL DIALYSIS

- Often not familiar with PD and only see patients with complications
- Prejudice that older patients cannot do PD so not offered
- Takes time to have discussions about treatment choices and give information so PD not offered or discussed

Delivering education to older patients

EDUCATIONAL CONSIDERATION	POTENTIAL ACTIONS
Cognitive dysfunction	Repeat information; easy to understand information; use active voice; use pictures (simple); 3-5 key points only
Visual and hearing impairment	Type size ≥12 points; double space; clear and loud audio
Physical impairment	Enable access to education
Limited usage of or access to web-based materials	Ensure paper formats available or offer assisted learning and devices for Internet based learning.

Learning outcomes for session

- Concept of frailty
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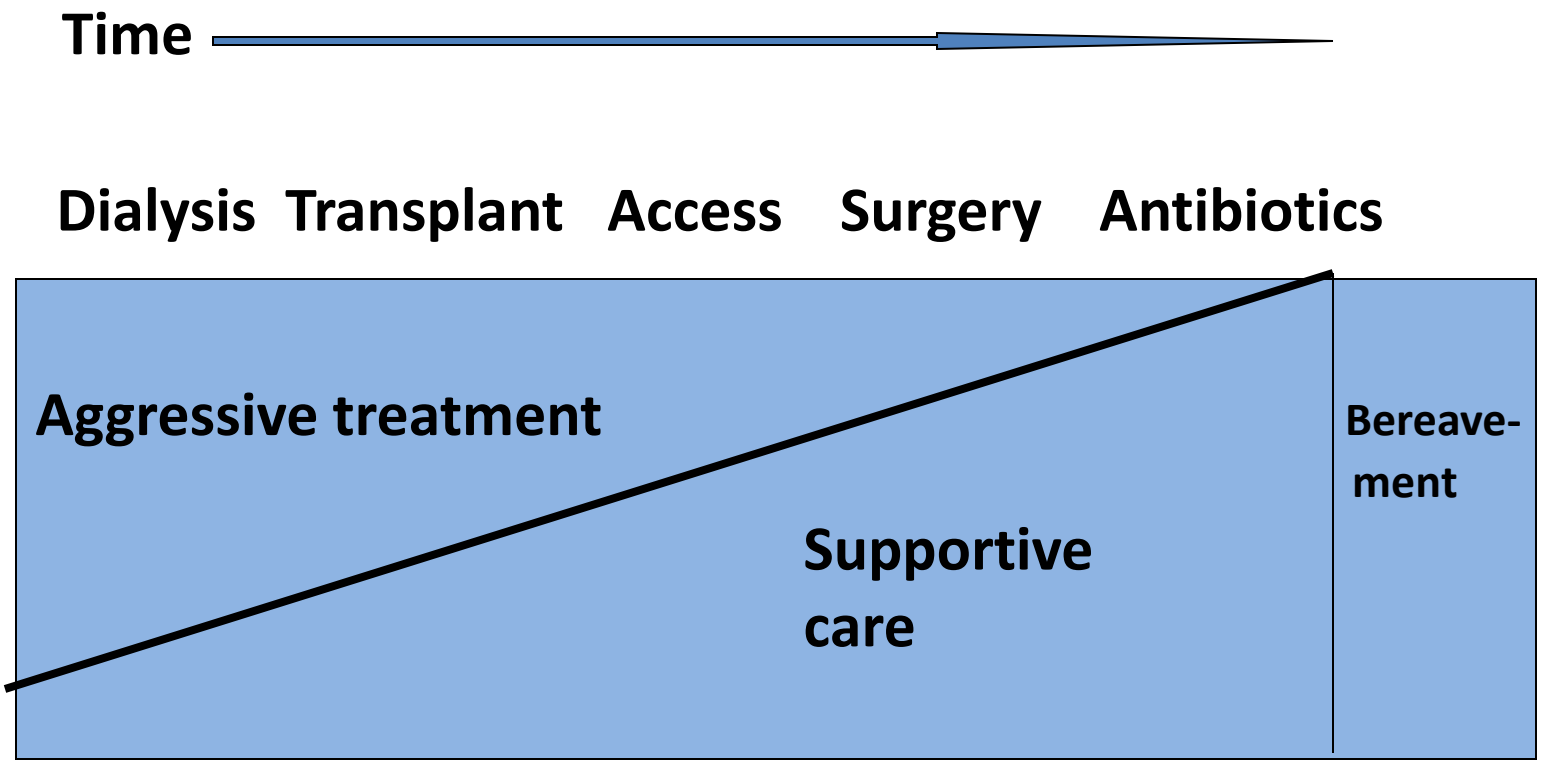
- Impact of frailty on patient outcomes and prognosis
- Dialysis or no dialysis?
- **Symptom recognition and management**
- **Recognising end of life**
- **Advance care planning**

Role of supportive care in advanced CKD management



Common symptoms that should be asked about – and are treatable

- Pain
- Nausea / Vomiting
- Shortness of breath
- Ankle swelling
- Pruritis
- Restless legs

Advance Care Planning

- Process of discussion between patient, family and healthcare providers to clarify values, treatment preferences and goals of end of life care
- Provides means to ensure that healthcare team and family are aware of patients' wishes for care if they become unable to make own decisions
- May include patient completing advance directive and/or appointment of substitute decision maker

Benefits of ACP

- Limited information for CKD or dialysis setting
- In general medical setting, evidence that ACP
  - increases patient and family satisfaction with care
  - increases likelihood that physicians and family understand and comply with patient wishes
  - increases hospice use
  - leads to less interventional care at end of life
  - contributes to lower stress, anxiety and depression in surviving relatives

Luckett T et al, AJKD 2014

EDITORIALS

Why is talking about dying such a challenge?

Much more needs to be done to encourage the conversation

Kirsty Boyd *consultant in palliative medicine*[1], Scott A Murray *St Columba's Hospice chair of primary palliative care*[2]

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How to talk about future care with patients and families

- Assess the person's understanding and awareness
- Find out what the person is thinking about the future
- Decide how urgently the person needs information about his or her deteriorating health

Boyd K, Murray SA. BMJ 2014

How to talk about future care with patients and families

- The person's health is deteriorating but he/she is ambivalent about being more open
  - I hope you will stay well for a long time, but I am also worried about……
  - I don't want to upset you, but it is difficult to look after you well if we don't talk about what might happen. What would be the best way for us to talk about that?

Boyd K, Murray SA. BMJ 2014

Edward Munch: Between the Clock and the Bed 1940-42