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Hospice Palliative Scales Part II

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Your Life Your Health

The Examiner

May 17, 2012

Details of the Karnofsky Score Performance Status

The Karnofsky Score may be requested under certain diagnoses.

Breast cancer

Progressive disease

- Worsening clinical signs – see below
- Worsening lab values
- Decreasing functional status
- Evidence of metastatic disease

Clinical signs

- Pain, nausea or vomiting
- Thrombosis or DIC
- Bone marrow involvement requiring transfusion
- Superior vena cava syndrome

Disease stage

- Stage IV (any T, any N, M1) at presentation
- Progression of any earlier stage of disease to metastatic with either of the following:
 1. Patient continues to decline in spite of definitive therapy
 2. Patient refuses further treatment

Performance status

- [Karnofsky score](#) 50% or less
- [Karnofsky score](#) 70% or higher, if patient has progressive disease, declines therapy, or does not qualify for therapy

Dementia

Must have 2 of the following

- Ability to speak is limited to 6 words or fewer
- Ambulatory ability is lost
- Cannot sit up without assistance
- Loss of ability to smile
- Cannot hold up head

Patient should show all of the following characteristics

- Inability to ambulate independently
- Unable to dress without assistance
- Unable to bathe properly
- Incontinence of urine and stool
- Unable to speak or communicate meaningfully

Failure to thrive/debility

Clinical signs

- Progression of disease documented by symptoms or test results
- Decline in [Karnofsky score](#)
- Weight loss supported by decreasing albumin or cholesterol
- Dependence with 2 or more of the following:
 1. Feeding
 2. Ambulation
 3. Continence
 4. Transfers
 5. Bathing and dressing
 6. Dysphagia leading to inadequate nutritional intake or recurrent aspiration
 7. Increasing emergency visits, hospitalizations, or MD follow-ups related to their primary medical diagnosis
 8. A score of 6 or 7 in the Functional Assessment Staging Test (FAST) for dementia
 9. Progressive stage 3-4 pressure ulcers in spite of care

Heart disease

Clinical signs

- Signs and symptoms of CHF at rest
- Optimal dose of diuretic and vasodilator therapy
- Ejection fraction of 20% or less
- Cardiac symptoms:
 1. Arrhythmias resistant to therapy
 2. History of cardiac arrest
 3. History of syncope
 4. Cardiogenic brain embolism

liver disease

- Cirrhosis/hepatic failure - not a candidate for liver transplant
- Ascites refractory to medical management (Dietary sodium restriction and diuretics)
- Hepatorenal syndrome
 1. Oliguria
 2. Urine Na < 10 mEq/L
 3. Elevated BUN/creatinine
- Hepatic encephalopathy refractory to medical management
- Hepatocellular carcinoma
- Recurrent variceal bleeding/spontaneous bacterial peritonitis

Lung cancer

Progressive disease

- Worsening clinical signs – see below
- Worsening lab values
- Decreasing functional status
- Evidence of metastatic disease, especially brain

Clinical signs

- Pain, nausea or vomiting
- Dyspnea
- Significant hemoptysis
- Superior vena cava syndrome
- Recurrent pneumonia
- Pericardial effusion/pleural effusion
- Any metastasis

Disease stage

- Stage IV (any T, any N, M1) at initial diagnosis
- Stage III disease with pleural effusion
- A patient with stage III disease who continues to decline in spite of therapy, or refuses therapy
- Performance status [Karnofsky score](#) of 70% or less

Prostate cancer

Progressive disease

- Worsening clinical signs – see below
- Decreasing functional status
- Evidence of metastatic disease

Clinical signs

- Pain, nausea or vomiting
- Thrombosis or DIC
- Bone marrow involvement requiring transfusion

Disease stage

- Stage IV (any T,N,or M1) at initial diagnosis
- Progression of an earlier stage of disease with either of the following:
 1. Patient continues to decline despite definitive therapy
 2. The patient is refractory or refuses further treatment

Performance status

- [Karnofsky score](#) of 50% or less
- [Karnofsky score](#) of 70% or less, if patient has progressive disease on therapy, or declines therapy

Pulmonary disease

Clinical signs

- Progression of disease documented by any of these symptoms:
 1. Dyspnea at rest
 2. Dyspnea on exertion
 3. Homebound/chairbound
 4. Oxygen dependent
 5. Copious/purulent sputum
 6. Cyanosis: fingertips, lips
 7. Barrel chested
 8. Poor response to bronchodilators

Functional status

- Decline in [Karnofsky score](#)
- Increased hospitalizations for pulmonary infections
- Decrease in FEV1 on serial testing of greater than 40 ml/year
- Hypoxemia at rest on supplemental oxygen
- Unintentional weight loss in the past 6 months
- Resting tachycardia (more than 100 per minute)

Renal disease

Clinical signs

- Uremia: clinical signs of renal failure:
 - Confusion, obtundation
 - Intractable nausea and vomiting
 - Generalized pruritus
 - Restlessness
 - Oliguria: urine output of less than 400 cc/24 hours
 - Intractable hyperkalemia: persistent serum potassium more than 7.0 not responsive to medical treatment
 - Uremic pericarditis
 - Hepatorenal syndrome
 - Intractable fluid overload

Laboratory criteria

- Both must be present:
 1. Creatinine clearance of less than 10 cc/minute
 2. Serum creatinine of more than 8.0 mg/dl

Stroke and coma

Clinical/functional status

- A continuous decline in clinical or functional status means the patient's prognosis is poor
- acute phase patients
- Comatose state lasting more than 3 days
- Comatose patients with any 4 of the following on day 3 of a stroke have 97% mortality by 2 months:
 1. Abnormal brain stem response
 2. Absent verbal response
 3. No response to pain
 4. Serum creatinine of more 1.5 mg/dl
 5. Age 70 or more
 6. Dysphagia severe enough to prevent them from receiving food or fluids

All other conditions

- The patient has a life-limiting condition
- The patient and family have been informed that the condition is life-limiting
- There is documentation of clinical progression of the disease
 1. serial physician assessment
 2. laboratory studies
 3. radiologic or other studies
 4. multiple ER visits
 5. inpatient hospitalizations
 6. home health nursing assessment if patient is homebound

- There's a recent decline in functional status, such as:
 - requires considerable assistance and frequent medical care
 - is disabled, requires special care and assistance, is unable to care for self, disease may be progressing rapidly
 - Severely disabled, although death is not imminent
 - Very sick, active supportive treatment is necessary
 - Moribund, fatal processes progressing rapidly and/or
 - Patient is dependent in at least 3 of these activities: bathing, dressing, feeding, transfers, continence of urine and stool, ambulation to bathroom and/or
 - recent impaired nutritional status, as evidenced by unintentional, progressive weight loss of 10% over past six months, or serum albumin less than 2.5 g/dl (may be helpful prognostic indicator but should not be used by itself)

The Palliative Performance Scale for Cancer Patients

“Accurate prognostication of the trajectory of an illness provides multiple benefits in end-of-life care. Prognostic information facilitates more realistic decision making regarding ongoing treatment, fosters risk-benefit considerations of specific interventions, and contributes to appropriate utilization of health care services. The Palliative Performance Scale (PPS) has been used as a tool for measurement of functional status in palliative care. This study explores the application of the PPS as a tool for projecting length of stay until death or discharge in a home-based hospice program.

PPS scores were associated with length of survival. Negative-change scores were predictive of patient decline toward death, while stable PPS ratings over time resulted in discharge consideration. The tool as used by this hospice was not highly discriminating between the 30% to 40% scores or the 50% to 70% scores.

CONCLUSION: The PPS scores are associated with patient length of survival in a hospice program and can be used in evaluating hospice appropriateness. (*Journal of Palliative Medicine (2005) Volume: 8, Issue: 3, Pages: 492-502*)

“Current literature suggests clinicians are not accurate in prognostication when estimating survival times of palliative care patients. There are reported studies in which the Palliative Performance Scale (PPS) is used as a prognostic tool to predict survival of these patients. Yet, their findings are different in terms of the presence of distinct PPS survival profiles and significant covariates. This study investigates the use of PPS as a prognostication tool for estimating survival times of patients with life-limiting illness in a palliative care unit. These findings are compared to those from earlier studies in terms of PPS survival profiles and covariates.

RESULTS:

Study findings revealed that admission PPS score was a strong predictor of survival in patients already identified as palliative, along with gender and age, but diagnosis was not significantly related to survival. We also found that scores of PPS 10% through PPS 50% led to distinct survival curves, and male patients had consistently lower survival rates than females regardless of PPS score.

CONCLUSION:

Our findings differ somewhat from earlier studies that suggested the presence of three distinct PPS survival profiles or bands, with diagnosis and non-cancer as significant covariates. Such differences are likely attributed to the size and characteristics of the patient populations involved and further analysis with larger patient samples may help clarify PPS use in prognosis.” (*Journal of Palliative Medicine (2006) Volume: 9, Issue: 5, Pages: 1066-1075*)

“The Palliative Performance Scale (PPS) was first introduced in 1996 as a new tool for measurement of performance status in palliative care. PPS has been used in many countries and has been translated into other languages.

Results: The intra-class correlation coefficients for absolute agreement were 0.959 and 0.964 for Group 1, at Time-1 and Time-2; 0.951 and 0.931 for Group 2, at Time-1 and Time-2 respectively. Results showed that the participants were consistent in their scoring over the two times, with a mean Cohen's kappa of 0.67 for Group 1 and 0.71 for Group 2. In the validity study, all experts agreed that PPS is a valuable clinical assessment tool in palliative care. Many of them have already incorporated PPS as part of their practice standard.

Conclusion: The results of the reliability study demonstrated that PPS is a reliable tool. The validity study found that most experts did not feel a need to further modify PPS and, only two experts requested that some performance status measures be defined more clearly. Areas of PPS use include prognostication, disease monitoring, care planning, hospital resource allocation, clinical teaching and research. PPS is also a good communication tool between palliative care workers.” (*BMC Palliative Care (2008) Volume: 7, Issue: 2, Publisher: BioMed Central, Pages: 10*)