Inclusion criteria for palliative care

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ควรนำผู้ป่วยเข้าในการดูแลแบบ palliative care เมื่อไร?

ผู้ป่วย palliative care มักเป็นผู้ป่วยโรคเรื้อรังที่โรคดำเนินมาจนถึงระยะท้าย โรคหรือภาวะดังกล่าวได้แก่

- Advance cancers
- Advance diseases with poor prognosis:
  - End-stage heart failure
  - End-stage lung diseases
  - End-stage renal failure
  - End-stage neurological diseases
- Cortical dementia
- HIV/AIDS

การพิจารณาว่าเมื่อใดควรเริ่มการดูแลแบบ palliative care บางครั้งไม่มีเส้นแบ่งแน่นอน ในประเทศสหรัฐอเมริกามีการกำหนด inclusion criteria เพื่อนำผู้ป่วยเข้ารับบริการแบบ hospice care จึงมีการกำหนดหลักการที่ชัดเจนเพื่อความสะดวกแก่แพทย์ในการวินิจฉัยและพิจารณานำผู้ป่วยเข้ารับบริการ (ตารางที่ 1) ผู้ป่วยสามารถได้รับการดูแลแบบ palliative care ขณะอยู่ในโรงพยาบาลและสามรถทำควบคู่กันไปกับการรักษาแบบ curative care แต่ถ้าผู้ป่วยต้องการรับบริการ hospice care มีข้อกำหนดว่าผู้ป่วยต้องยุติการรักษาแบบ curative

ในส่วนของประเทศสหราชอาณาจักร ได้มีข้อแนะนำให้แก่แพทย์ในการนำผู้ป่วยเข้าสู่การดูแลแบบ palliative care ตาม Gold Standard Framework โดยการให้แพทย์ถามคำถามในใจว่าท่านจะประหลาดใจหรือไม่ถ้าผู้ป่วยรายนี้จะเสียชีวิตภายใน 6-12 เดือน (Surprise question) ถ้าคำตอบคือไม่ประหลาดใจผู้ป่วยรายนั้นคือผู้ป่วย palliative แต่ถ้าคำตอบคือประหลาดใจหรือไม่แน่ใจ ให้แพทย์มองหา general clinical indicators ที่บ่งบอกถึงสมรรถนะที่ถดถอยหรือการต้องเข้ารักษาตัวในโรงพยาบาลบ่อยหรือมีโรคร่วมอื่นๆที่มีผลต่อการดำเนินโรคของผู้ป่วย นอกจากนี้ให้แพทย์ดูว่ามี disease related indicators ด้วยหรือไม่ (ตารางที่ 2)

ในส่วนของผู้ป่วยเด็ก เนื่องจากการเสียชีวิตในเด็กส่วนใหญ่แตกต่างจากผู้ใหญ่ซึ่งในผู้ใหญ่มักเสียชีวิตจากโรคเรื้อรัง ในเด็กพบว่าการเสียชีวิตส่วนใหญ่อยู่ในช่วงทารกแรกคลอดจากภาวะคลอดก่อนกำหนดและภาวะความพิการแต่กำเนิด และโรคเรื้องรังในเด็กมักเป็นโรคจากภาวะผิดปกติทางพันธุกรรมและเมตาโบลิก รวมถึงการดำเนินโรคจะเรื้อรัง และอยู่ในโปรแกรมบริการนานกว่าผู้ใหญ่ The Center for Advance Palliative Care ในสหรัฐอเมริกาได้กำหนด inclusion criteria ในการนำผู้ป่วยเด็กเข้าสู่โปรแกรม ดังในตารางที่ 3.

ต้องเข้าใจว่า palliative care ไม่ใช่ cancer care หรือ chronic care หรือ geriatric care แต่ผู้ป่วยที่มีโรคมะเร็ง โรคเรื้อรังหรือผู้สูงอายุในระยะท้ายจำเป็นต้องมีการดูแลแบบ palliative care

ตารางที่ 1. National Hospice and Palliative Care Organization

General Medical Guidelines for Determining Prognosis in Selected Non-Cancer Diseases

The patient should meet all of the following criteria:

I. The patient's condition is life limiting, and the patient and/or family know this

II. The patient and/or family have elected treatment goals directed toward relief of symptoms, rather than the underlying disease

III. The patient has either of the following:

A. Documented clinical progression of the disease, which may include:

1. Progression of the primary disease process as listed in the disease-specific criteria, as documented by serial physician assessment, laboratory, radiologic, or other studies

2. Multiple emergency department visits or inpatient hospitalizations over the prior 6 months

3. For homebound patients receiving home health services, nursing assessment may document decline

4. For patients who do not qualify under 1, 2, or 3, a recent decline in functional status should be documented; clinical judgment is required

B. Documented recent impaired nutritional status related to the terminal process:

1. Unintentional, progressive weight loss of >10% over the prior 6 months

2. Serum albumin <25 g/L may be a helpful prognostic indicator, but should not be used in isolation from other factors above

Highlights of Guidelines for Specific Diseases	
Heart Disease	I. Intractable or frequently recurrent symptomatic heart failure, or intractable angina pectoris with heart failure
	II. Patients should already be optimally treated with diuretics and vasodilators
	III. Other factors contributing to a poor prognosis: symptomatic arrhythmias, history of cardiac arrest and resuscitation or syncope, cardiogenic brain embolism, or concomitant human immunodeficiency virus disease
Pulmonary disease	I. Severe chronic lung disease, documented by dyspnea at rest, fatigue, decreased functional ability, or increased exacerbation
	II. Cor pulmonale or right heart failure
	III. Hypoxemia at rest on supplemental oxygen
	IV. Hypercapnia (pCO_2>50 mm Hg)
	V. Other factors contributing to a poor prognosis: unintentional continuing weight loss of >10% body weight over the preceding 6 months; resting tachycardia greater than 100/min
Dementia	I. Severe dementia: unable to ambulate without assistance and unable to communicate meaningfully
	II. Presence of medical complications: aspiration pneumonia, sepsis, intractable decubitus ulcers
	III. Other factors contributing to a poor prognosis: unable to dress without assistance, unable to bathe properly, urinary and fecal incontinence
HIV	I. $CD4^+$ count <25 cells/μL

	II. Viral load >100 000 copies/mL
	III. Life-threatening concomitant conditions
	IV. Other factors contributing to a poor prognosis: chronic persistent diarrhea for 1 year; persistent serum albumin <25 g/L; concomitant substance abuse; age >50 years; decisions to forgo human immunodeficiency virus disease treatment; and symptomatic heart failure
Liver disease, advanced cirrhosis	I. Both serum albumin <25 g/L, and either international normalized ratio >1.5 on no anticoagulants, or prothrombin time prolonged >5 seconds over control
	II. At least 1 of the following: intractable ascites or hepatic encephalopathy, spontaneous bacterial peritonitis, hepatorenal syndrome, recurrent variceal bleeding
	III. Other factors contributing to a poor prognosis: progressive malnutrition, muscle wasting, continued active alcoholism, hepatocellular carcinoma, and hepatitis B surface antigen positivity
Renal disease	I. Creatinine clearance <0.17 mL/s (10 mL/min) and serum creatinine greater than 707.2 µmol/L (8.0 mg/dL)
	II. End stage renal disease discontinuing dialysis, or dialysis-eligible but refusing, and therefore with uremia, oliguria, intractable hyperkalemia, uremic pericarditis, hepatorenal syndrome, and/or intractable fluid overload
	III. Other factors contributing to a poor prognosis: mechanical ventilation, malignancy of other organ systems, chronic lung disease, advanced cardiac disease, advanced liver disease, sepsis, immunosuppression/acquired immunodeficiency syndrome, albumin <35 g/L, cachexia, platelet count <25 × 10^9/L, age >75 years, disseminated intravascular coagulation, gastrointestinal bleeding
Acute stroke and coma	I. Coma or persistent vegetative state, beyond 3 days' duration, or
	II. In postanoxic state, coma or severe obtundation, accompanied by severe myoclonus, persisting beyond 3 days past the anoxic event, or
	III. Comatose patients with any 4 of the following on day 3 of coma (97% mortality by 3 months): abnormal brain stem response, absent verbal response, absent withdrawal response to pain, serum creatinine >132.6 µmol/L (1.5 mg/dL), age >70 years, or
	IV. Dysphagia severe enough to prevent the patient from receiving foods and fluids necessary to sustain life (patient not using artificial nutrition/hydration)
Chronic, after stroke	I. Poor functional status, as evidenced by Karnofsky score of <50%, with evidence of recent decline
	II. Medical complications related to debility and progressive clinical decline, such as: aspiration pneumonia, upper urinary tract infection, sepsis, refractory stage 3-4 decubitus ulcers, or fever recurrent after antibiotics
	III. Also weigh: post-stroke severe dementia; age >70 years; poor nutritional status
Adapted with permission from: National Hospice Organization. Medical Guidelines for Determining Prognosis in Selected Non-Cancer Diseases; 1996.	

ตารางที่ 2. The Gold Standard Framework. Prognostic Indicator Guidance.

Identifying patients for supportive and palliative care

NHS Lothian

Supportive & Palliative Care Indicators Tool

1. Ask

Would it be a surprise if this patient died in the next 6-12 months? **No**

2. Look for two or more general clinical indicators

- Performance status poor (limited self care; in bed or chair over 50% of the day) or deteriorating.
- Progressive weight loss (>10%) over the past 6 months.
- Two or more unplanned admissions in the past 6 months.
- A new diagnosis of a progressive, life limiting illness.
- Two or more advanced or complex conditions (multi-morbidity).
- Patient is in a nursing care home or NHS continuing care unit; or needs more care at home.

3. Now look for two or more disease related indicators

Heart disease

- NYHA Class III/IV heart failure, severe valve disease or extensive coronary artery disease.
- Breathless or chest pain at rest or on minimal exertion.
- Persistent symptoms despite optimal tolerated therapy.
- Systolic blood pressure < 100mmHg and /or pulse > 100.
- Renal impairment (eGFR < 30 ml/min).
- Cardiac cachexia.
- Two or more acute episodes needing intravenous therapy in past 6 months.

Kidney disease

- Stage 4 or 5 chronic kidney disease (eGFR < 30ml/min).
- Conservative kidney management due to multi-morbidity.
- Deteriorating on renal replacement therapy with persistent symptoms and/or increasing dependency.
- Not starting dialysis following failure of a renal transplant.
- New life limiting condition or kidney failure as a complication of another condition or treatment.

Respiratory disease

- Severe airways obstruction (FEV1 < 30%) or restrictive deficit (vital capacity < 60%, transfer factor < 40%).
- Meets criteria for long term oxygen therapy (PaO2 < 7.3 kPa).
- Breathless at rest or on minimal exertion between exacerbations.
- Persistent severe symptoms despite optimal tolerated therapy.
- Symptomatic right heart failure.
- Low body mass index (< 21).
- More emergency admissions (> 3) for infective exacerbations or respiratory failure in past year.

Liver disease

- Advanced cirrhosis with one or more complications:
  - intractable ascites
  - hepatic encephalopathy
  - hepatorenal syndrome
  - bacterial peritonitis
  - recurrent variceal bleeds
- Serum albumin < 25g/l and prothrombin time raised or INR prolonged (INR > 2).
- Hepatocellular carcinoma.
- Not fit for liver transplant.

Cancer

- Performance status deteriorating due to metastatic cancer and/ or co-morbidities.
- Persistent symptoms despite optimal palliative oncology treatment or too frail for oncology treatment.

Neurological disease

- Progressive deterioration in physical and/or cognitive function despite optimal therapy.
- Symptoms which are complex and difficult to control.
- Speech problems with increasing difficulty communicating and/or progressive dysphagia.
- Recurrent aspiration pneumonia; breathless or respiratory failure.

Dementia

- Unable to dress, walk or eat without assistance; unable to communicate meaningfully.
- Worsening eating problems (dysphagia or dementia related) - now needing pureed/ soft diet or supplements.
- Recurrent febrile episodes or infections; aspiration pneumonia.
- Urinary and faecal incontinence.

4. Assess patient & family for supportive & palliative care needs. Review treatment/ medication. Plan care. Consider patient for general practice palliative care register.

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ตารางที่ 3. CAPC Inclusion criteria in pediatric age group

General referral criteria	Automatic	Suggested
Presence of a chronic, complex or life-threatening illness/condition AND one or more of the following	• Conflicts regarding use of medical nutrition/hydration in cognitively impaired, seriously ill or dying patients	• New diagnosis of life-limiting or life-threatening disease • Three or more hospitalizations within 6 months • Difficult pain symptom management • Patient, family or physician uncertainty regarding prognosis • Family with limited social supports • AND (Aloow Natural Death)/DNR order or other ethical conflicts • Complex care coordination and/or homegoing needs • Prolonged hospitalization for >3 weeks • Need for hospice resource utilization
Malignant disease criteria	• Progressive metastatic cancer • Bone marrow/stem cell transplant • Diffuse intrinsic pontine glioma • Stage IV neuroblastoma • Relapsed malignant disease following stemcell/bone marrow transplant	• Any newly diagnosed malignant disease with an EFS of <40% with current therapies • Any relapsed malignant disease • Metastatic solid tumors • New diagnosis with complex pain or symptom management issues
Pulmonary criteria	• Patients with CF considering lung transplant/at the time of transplant • Patients with CF with FEV!<30% • Patients with CF with vent dependence or those ineligible for lung transplant • Bronchiolitis obliterans	• Patients with CF with multiple hospitalizations • Patients with CF with pain, dyspnea or other symptoms who would benefit from symptom management • Central hypoventilation syndrome • Patients who are chronically ventilator dependent
Genetic criteria	• Trisomy 18, 13,15 • Asphysixiating thoracic dystrophy • Severe forms of osteogenesis imperfect (type 3 or 4) • Potter Syndrome • Epidermolysis Bullosa	• Rett's syndrome • Other rare chromosomal anomalies with known poor neurologic prognosis
Neurologic/ Neuromuscular/Neuro degenerative criteria	• Progressive neurodegenerative conditions • Muscular dystrophy • Spinal muscular dystrophy • Severe traumatic brain injury • Persistent vegetative state • Batten disease	• Static encephalopathy • MRCP with comorbidities • Severe anoxic brain injury (not neonatal)

	• Metachromatic leukodystrophy/ALD • Brain reduction syndrome: anencephaly, hydranencephaly, Lissencephaly, severe schizencephaly	
Metabolic /inclusion disease criteria	• Krabbe's disease • Hunter's/Hurler's disease • Menke's disease • Pompe disease • Sanfilippo symdrome • Tay Sachs disease • Fabry's disease • Sandoff's disease	• Severe mitochrondrial disorder • Severe metabolic disorders for which BMT is a therapeutic consideration
Infectious disease criteria	• HIV/AID resistant to antiretrovirals • Severe combined immune deficiency	• Congenital CMV/toxo with neurological sequelae • Severe encephalitis • Severe immunodeficiency syndrome, particularly those for which BMT is a consideration
Orthopedic criteria	• Thanatophoric dwarfism	• Severe progressive scoliosis • Severe form of dwarfism
Renal criteria	• Neonatal polycystic kidney	• Renal failure, not transplant candidate
Gastrointestinal criteria	• Muti-visceral organ transplant under consideration • Biliary atresia • Total aganglionosis of colon • Progressive hepatic or uremic emcephalopathy	• Feeding tube under consideration for any nerologic condition • Long-segment Hirshsprung's • Short-gut syndrome with TPN dependence • Severe-feeding intolerance (autonomic enteropathy/chronic interestinal pseudo obstruction)
Neonatal criteria	• Extreme prematurity with concomitant severe BPD, grade IV IVH, PVL, etc. • Severe birth asphyxia • Hypoxic ischemic encephalopathy (moderate to severe)	• VLBW infants
Cardiac criteria	• Single ventricular cardiac physiology • Severe pulmonary hypertension • Down syndrome with significant cardiac abnormality • Ebstein's anomaly • Eisenmanger's syndrome • Cardiomyopathy: hypertrophic or severe dilated • Pulmonary atresia (especially if associated with hypoplastic pulmonary atresia)ongoing discussion of cardiac transplant	• Complex congenital hear disease • ECMO candidate • Severe myocarditis

	• Combination of cardiac diagnosis with underlying neurologic/chromosomal diagnosis	
Intensive care criteria	• Prolonged or failed attempt to wean mechanical ventilator • Multi-organ system failure • Compassionate extubation • Severe head injury following NAT	• PICU stay longer than two weeks • Irreversible brain injury that will impact functional status • Immersion injury

บรรณานุกรม

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2. Lynn J. Serving patients who may die soon and their families: The role of hospice and other services. JAMA 2001;285:925-32.
3. Royal College of General Practitioners. The Gold Standard Framework. Prognostic Indicator Guidance. http://www.gpscbc.ca/system/files/11_EOL_PSP_GSF_Prognostic_Indicator_0.pdf (access April 2014).