Edmonton Staging System for Cancer Pain

Overview: The Edmonton Staging System can be used to evaluate a patient with cancer-related pain. This can identify patients who may require greater efforts to achieve pain control or who may have poor pain control despite all interventions. The authors are from Edmonton in Alberta Canada.

Parameters:

(1) mechanism of pain (A)

(2) pain characteristics (B)

(3) previous opioid exposure (C)

(4) cognitive function (D)

(5) psychological distress (E)

(6) tolerance to opioid (F)

(7) past history for alcohol or drug addiction (G)

Parameter	Finding	Designation
mechanism of pain	visceral pain	A1
	bone or soft tissue pain	A2
	neuropathic pain	A3
	mixed neuropathic and non-neuropathic pain	A4
	unknown	A5
pain characteristics	nonincidental pain	B1
	incidental pain	B2
previous opioid exposure	less than 60 mg or equivalent of oral morphine per day	C1
	60 - 300 mg or equivalent of oral morphine per day	C2
	> 300 mg or equivalent of oral morphine per day	C3
cognitive function	normal cognitive function	D1
	impaired cognitive function	D2
psychological distress	without major psychological distress	E1
	with major psychological distress	E2

tolerance	increase of < 5% of initial dose per day	F1
	increase >= 5% of initial dose per day	F2
past history	negative history for alcoholism or drug addiction	G1
	positive history of alcoholism or drug addiction	G2

where: • Visceral pain = pain due to visceral involvement by tumor. It is usually not well-localized. It may be described as dull aching or cramping.

• Bone or soft tissue pain = pain affecting a bone or soft tissue area that is usually well localized and which is often described as aching.

• Neuropathic pain = pain located in a the region where a nerve or nerve root has been damaged. It may be associated with motor and/or sensory deficits autonomic changes paresthesias or paroxysmal episodes of pain.

• Mixed pain = presence of both neuropathic and non-neuropathic pain.

• Unknown pain = mechanism of pain unknown after complete clinical history physical examiantion and imaging studies.

After initial development items C and D were eliminated from staging for prognosis since they did not show independent correlation (p values 0.05 and 0.72 respectively vs < 0.01 for the other parameters).

Stages of pain as determined by prognosis for pain control:

(1) Stage 1: good prognosis

(2) Stage 2: poor prognosis

Poor prognosis if any of the following:

(1) A3 A3 or A5, (2) B2, (3) E2, (4) F2, (5) G2

If not poor prognosis then considered good prognosis with good prospects for cancer control.

Many patients (> 50%) in the "poor" prognostic group can still achieve good pain control but this may require greater effort or clinical expertise.

References:

Bruera E Schoeller T et al. A prospective multicenter asssessment of the Edmonton Staging System for cancer pain. J Pain Symptom Management. 1995; 10: 348-355.