Surgical Palliative Care Immersion Training
March 11, 2015

University of Arizona Department of Surgery
Arizona Center on Aging
Welcome & Introductions

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Disclosures

- Our faculty, CME Planning Committee Members, and the CME Office Reviewer have disclosed that they have no financial relationships with commercial interests that would constitute a conflict of interest concerning this CME activity.
Objectives

The Surgical Palliative Care Immersion Training Program includes a half-day highly interactive and case based learning sessions.

As a result of this educational activity, participants will be better able to:

- Train and demonstrate care management best practices for hospitalized complex patients
- Apply teaching and leadership skills, including conflict resolution and providing feedback
- Promote collaboration among disciplines in the care management of hospitalized complex patients
- Develop and implement a quality improvement project
Accreditation/Designation Statement

• The University of Arizona College of Medicine at the Arizona Health Sciences Center is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

• The University of Arizona College of Medicine at the Arizona Health Sciences Center designates this live activity for a maximum of 3.5 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.
Surgical Palliative Care Immersion Training Program Overview

Leigh Neumayer, MD, MS
Disclosures

• Thanks to Raoof and Krouse for slides!
• Thanks to the entire group who have worked hard to put this together
Palliative Care

An interdisciplinary team approach to care with a focus on comfort and quality of life rather than prolongation or ‘cure’ for a patient and their loved ones.
Palliative Surgery

Surgery ... with the sole intent of improving quality of life and symptom burden.
Surgical Palliative Care

• Surgical palliative care is interdisciplinary care whose goal is to relieve suffering and improve quality of life of the patient and his/her family dealing with a serious illness.

• It is by no means limited to patients in the final days to weeks of life.
Palliative approach: a balance
Lynn J, Adamson DM. Living Well at the End of Life. Santa Monica: Rand; 2003
What do our patients with life-threatening illness want?

1. Pain and symptom control
2. To avoid inappropriate prolongation of the dying process
3. To achieve a sense of control
4. To relieve burdens on their families
5. To strengthen relationships with loved ones

Singer et al. JAMA 1999;281(2):163-168
What do the caregivers want?

1. To have the patient’s wishes honored
2. To be included in the decision process
3. Support at home; practical help in the form of transportation, medicines, equipment
4. Honest information and privacy
5. To be contacted after the death of the loved one

Tolle et al. Study of 475 family members 1-2 years after bereavement, Oregon report card. 1999 www.ohsu.edu/ethics
What do our patients with life-threatening illness experience?

Study of 9000 hospital patients:

• 50% patients experienced moderate to severe pain regularly

• >50% had severe pain during their last three days of life.

• 38% of people who died spent >10 days in an ICU, in coma, or on a ventilator.

Reasons surgeons should be part of the palliative care team

• May have intimate knowledge of the patient and their families

• Knowledge/experience with surgical and other invasive procedures

• Ensure surgical focus on QOL

• Surgeons need to be aware of alternative approaches and opportunities for their patients

• Potential for interdisciplinary research
Surgery as Palliative Therapy of Advanced Cancers

Benefits

Primary: Quality of Life
- Symptom control (e.g., pain, shortness of breath, emesis)
- Symptom prevention (e.g., neurologic, fractures)
Secondary: Survival

Risks

- Morbidity (e.g., pain, immobility, hospitalization, worsening of symptoms)
- Mortality (treatment-related)

(Markman, Seminars in Oncology, 1995)
What are the goals of palliative surgery? Survey of SSO members, 2000

- Symptom relief
- Pain relief
- Maintaining patient independence/function
- Symptom avoidance
- Decreased hospitalization
- Improved body image
- Minimizing burden of care
- Increasing patient survival

McCahill LE, et al., Ann Surg Oncol, 2002
SSO Survey outcomes

- Surgeons estimated 21% of cases for palliation

- Define based on preoperative intent (41%), tumor present on completion of surgery (95%), survival time not an important parameter (58%)

- Symptom relief, pain relief, maintaining independence/function

McCahill, Ann Surg Onc, 2002
Palliative Surgery and the American College of Surgeons

- The surgeon’s role in palliative care, Robert A. Milch and Geoffrey P. Dunn, Bulletin of the American College of Surgeons, April 1997
- First meeting as Working Group September 10, 2001
- Elevated to Task Force October 2003
- Statement of Principles of Palliative Care, Bulletin of the American College of Surgeons, 2005
- Surgical Palliative Care: A Resident’s Guide, 2009
- Committee on Surgical Palliative Care, August 2013
Mission

To incorporate the precepts and techniques of palliative care into surgical clinical practice, education, research and advocacy

May 2013
ACS Advisory Board

- Surgeons with various backgrounds and interests
- Engage American College of Surgeons
- Plan for new members to the Committee
Module 1: Palliative Surgery
Case Discussion
Artificial Hydration/Nutrition and Malignant Bowel Obstruction

Robert Krouse, MD
MBO is a common palliative care problem

- 43% surgical consults (Badgwell, Supp Care Ca, 2009)
- 64% small bowel obstructions (Badgwell, J Pall Med, 2011)
- 5-43% of patients with advanced primary or metastatic intra-abdominal malignancy
  - 5-51% of patients with ovarian cancer (~20,000/yr)
  - 10-28% of patients with colorectal cancer (~150,000/yr)
  - Other intraperitoneal primaries (bladder, cervix, gastric, pseudomyxoma peritonei)
  - Non-intraperitoneal primaries (lung, breast, melanoma)
MBO - Treatment

• Aggressive non-surgical palliative care options can help avoid an operation in some patients with MBO

• Endoscopic stenting and PEGs have roles in the care of MBO

• There are many clinical scenarios when an operation is unlikely to benefit patients with MBO

Krouse, JACS, 2002
Surgical Consult for MBO-Treatments

• Small bowel obstruction (N=122)
  – Surgical treatment (25%)
  – Endoscopic or IR procedures (24%)
  – Nonoperative/Nonprocedural management (52%)

• Large bowel obstruction (N=28)
  – Surgical treatment (57%)
  – Endoscopic or IR procedures (18%)
  – Nonoperative/Nonprocedural management (25%)

When is the optimal approach for MBO unclear?

- Ascites
- Carcinomatosis
- Multiple obstructions
- Palpable intra-abdominal mass
- Diffuse metastatic disease
- Recurrent MBO
- Multiple medical problems
- History of multiple intra abdominal operations
Symptom Management Approach for MBO

- Nasogastric decompression
- Hydration
- Opioids
- Anti-emetics (haloperidol, odansatron prochlorperazine, etc.)- 30% complete relief of emesis
- Octreotide- 75-100% response rate
- Anti-cholinergics (Scopolamine)
- Steroids
- TPN
What is the optimal outcome measure for MBO?

- Alleviate nausea/vomiting
- Recurrence of obstruction
- Ability to have bowel movement/return of bowel function
- Allow to go home/leave hospital
- Enable to eat/drink
- Morbidity and mortality
- Improve survival

(Feuer, Gyn Onc, 1999)
MBO and Surgery-
Beliefs and Reality

Belief
- Probable best modality if patient has “reasonable” expected survival
- May spend shorter time in hospital
- May relieve possible ischemia/infarction of bowel
- May improve survival

Reality
- Explorations alone- 3-18%
- 10-50% chance of recurrence
- Morbidity ~42%
- May spend longer time in hospital
- Mortality 5-32%
- QOL improvement variable (42-85%)
Anorexia - Facts

- Part of the disease process and a natural part of life coming to a close
- Patient is not starving because starvation relates to the lack of *needed* calories
- Patients can live comfortably for long periods on minimal food and water
- Forcing food may cause discomfort, nausea, and aspiration with associated respiratory distress
Reversible Causes of Anorexia

• Aches and pains
• Nausea and gastrointestinal dysfunction
• Oral candidiasis
• Reactive (or organic) depression or anxiety
• Evacuation problems (constipation, retention)
• Xerostomia (dry mouth)
• Iatrogenic (radiation, chemotherapy, drugs)
• Acid-related problems (gastritis, peptic ulcers)
Anorexia Action Plans

• Allow patients to be the guides to new eating habits. Let them choose favorite foods, how and when they are to be eaten, how much will be eaten. Discuss food goals with patients.

• Offer easy-to-swallow foods (soup, pudding, ice cream)

• Liberalize dietary restrictions. Blood sugar control and salt intake less important especially when patients are eating less food in general.
Appetite Stimulants

- Medroxyprogesterone (MPA), 500 mg/day or megestrol acetate (MA), 320 mg/day
- Oral supplementation with eicosapentaenoic acid (EPA), 2.2 gm/day
- L-carnitine, 4 gm/day
- Thalidomide, 200mg/day
- A combination of the above products (MPA or MA plus EPA plus L-carnitine plus thalidomide)
- Cannabinoids
Role of Artificial Nutrition/Hydration (ANH)

- No studies have provided evidence that ANH improves the healing rate of decubitus ulcers or other infections.

- Some patients receiving total parenteral nutrition (TPN) experience increased survival rates of at least 3 months.

- TPN for patients receiving chemotx is associated with decreased survival, decreases response to chemotx, and increased infection.

- Significant potential adverse effects of AN include infection, thrombosis with TPN, aspiration with PEG tube feedings.

- Patients at this time do not experience hunger or thirst, do not request food or fluid beyond a taste or mouth moistening, and remain comfortable and peaceful as long as other symptoms are aggressively controlled.
Role of Artificial Nutrition/Hydration (ANH) – Recommendations

• A short-term trial of IV fluids or hypdermoclysis may help mitigate mental status changes, generalized weakness, or malaise in patients with anticipated life expectancy of at least several days

• Establish a time frame to evaluate whether predetermined goals have been achieved

• Ensure families understand a lack of nutrition and fluids does not increase suffering for dying patients; decreased intake is a normal part of the dying process
Report Out and Wrap Up
Surgical Palliative Care Immersion Training
Role Play

Stacie Pinderhughes, MD
Module 2: Symptom Management
Case Discussion
Pain & Dyspnea

Michelle Rhodes, MD
Assistant Professor of Emergency, Palliative and Hospice Medicine
Nothing to disclose.
Objectives

- Total pain
- Individual patient factors to consider
- Principles of pain management
- Equianalgesic dosing & cross tolerance
- Approach to dyspnea
Total Pain

Psychological
- Anxiety
- Fear

Spiritual
- Meaning
- Faith

Physical
- Disease
- Treatment

Social
- Job loss
- Dependency
WHO Analgesic Ladder

1. Pain
   - Non-opioid ± adjuvant

2. Pain persisting or increasing
   - Weak opioid ± non-opioid ± adjuvant

3. Pain persisting or increasing
   - Strong opioid ± non-opioid ± adjuvant

4. Freedom from cancer pain
   - None of the above
Individualized to Patient

- Acute vs chronic pain
- Life-limiting illness versus not
- Extremes of age
- Oral route unavailable/abnormal
- Malnutrition/cachexia present
- Somatic/visceral/neuropathic
- Renal or hepatic impairment
Opioid Management

• Around the Clock
  – Long acting preparations
  – Continuous infusion
  – Scheduled immediate release

• Rescue doses/immediate release
  – Usually ~15% of the 24 hour continuous
  – Q3hours typically

• PRN Used Alone Usually = Poor Pain Control
  – Exceptions: opioid naïve, renal or hepatic failure, only incident pain
Titration of Pain Medication

• Escalation dependent upon severity of pain
  – 25-50% for mild-moderately uncontrolled
  – 50-100% for severely uncontrolled

• Rapidity based upon ½ life of drug being used
  – Immediate release every 2-3 hours
  – Long acting oral every 24 hours
  – Fentanyl patch every 2-3 days
  – Methadone every 5-7 days
## Equianalgesic Opioid Dosing

<table>
<thead>
<tr>
<th>Drug</th>
<th>Equianalgesic Doses (mg)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Parenteral</td>
<td>Oral</td>
<td></td>
</tr>
<tr>
<td>Morphine</td>
<td>10</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Buprenorphine</td>
<td>0.3</td>
<td>0.4 (sl)</td>
<td></td>
</tr>
<tr>
<td>Codeine</td>
<td>100</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>Fentanyl</td>
<td>0.1</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>Hydrocodone</td>
<td>NA</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Hydromorphone</td>
<td>1.5</td>
<td>7.5</td>
<td></td>
</tr>
<tr>
<td>Meperidine</td>
<td>100</td>
<td>300</td>
<td></td>
</tr>
<tr>
<td>Oxycodone</td>
<td>10*</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Oxymorphone</td>
<td>1</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Tramadol</td>
<td>100*</td>
<td>120</td>
<td></td>
</tr>
</tbody>
</table>

*Not available in the US

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NOTE: Learner is STRONGLY encouraged to access original work to review all caveats and explanations pertaining to this chart.
Incomplete Cross Tolerance

- Tolerance to a particular opioid does not directly correlate with tolerance to a different opioid.
- Adjustment (% decrease) based on equianalgesic table
  - Poor pain control: use 100%
  - Moderate: 50%
  - Excellent: 25%
Common Side Effects

<table>
<thead>
<tr>
<th>Problem</th>
<th>Tolerance</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constipation</td>
<td>Never</td>
<td>Stimulant laxative</td>
</tr>
<tr>
<td>Nausea</td>
<td>Days</td>
<td>PRN antiemetic</td>
</tr>
<tr>
<td>Sedation</td>
<td>Days</td>
<td>methylphenidate</td>
</tr>
<tr>
<td>Pruritus</td>
<td>Variable</td>
<td>Change opioid</td>
</tr>
</tbody>
</table>

Respiratory depression very *uncommon* when dosing and titration appropriate.

- **RISK FACTORS:** rapid IV push, new or worsening renal or hepatic impairment, rapid escalation of fentanyl/methadone
Adjuvant Analgesics

- Antidepressants: TCAs and SNRIs effect on neuropathic pain
- Anticonvulsants: gabapentin, pregabalin most common
- Corticosteroids: dexamethasone 2-8 mg/day
Non-drug Therapies

- Interventional modalities
- Chemotherapy
- Radiation
- Acupuncture and other CAM
Dyspnea: Cause Specific

- Transfusion
- Antibiotics (based on prognosis)
- Thoracentesis
- Paracentesis
- Stent
Dyspnea: Non-pharmacologic

- Elevate HOB
- Fan blowing on face
- High flow oxygen by NC
- +/- Non-invasive ventilatory strategies
Dyspnea: Pharmacologic

- Low dose opioids have highest quality evidence for treatment of dyspnea and cough.
- IF anxiety contributing, try low dose benzos
- Consider lidocaine neb for persistent cough (code cart kind can be used for inhalation)
Pitfalls

• Lack of long-acting or around the clock pain relief
• Diagnosis of ‘drug seeking’ when typically pseudoaddiction
• Fentanyl patches on the very thin
• Fear of oversedation or respiratory depression
• Over-reliance on vital signs as a measure of pain, particularly in chronic pain
Questions
Surgical Palliative Care
Immersion Training: Delirium

Stacie T. Pinderhughes, MD
Chair, Division of Palliative Medicine
Banner Health
Objectives

• Describe the assessment of delirium
• Identify how to best treat delirium
• Recognize terminal delirium in the dying patient
Delirium

• An acute, fluctuating change in mental status accompanied by:
  – Sleep/wake cycle disruption
  – Inattention
  – Altered perceptions (hallucinations/delusions)
Types

• Hyperactive
  – Agitated and combative
  – Hallucinations/delusional beliefs
  – Inattentive

• Hypoactive
  – Calm
  – Inattentive; decreased mobility
  – Mistaken for depression or fatigue

• Mixed – waxing and waning
Prevalence and Prognosis

• 80 – 85% of terminally ill patients develop
• ICU delirium increased risk of
  – Long hospitalization
  – Increased institutionalization
  – Protracted postoperative recovery
  – Higher short and long term mortality
Assessment

• Clinical history, physical examination, serial observations
• CAM-ICU
• Review of medication regimen
• Medical work up to figure out the underlying cause
Mr. Jones is confused, what should we do?

- Focused assessment
- Terminal delirium?
- Disease trajectory and goals of care
Pathophysiology ...

- Infection
- Withdrawal
- Acute metabolic
- Trauma
- CNS pathology
- Hypoxia
- Deficiencies
- Endocrinopathies
- Acute vascular
- Toxins or drugs
- Heavy metals
Treatment

• Education; extremely disturbing to patients and family members
• Identifying and treating underlying cause
• Non-pharmacological and pharmacological interventions
• Look for common reversible etiologies
Non-Pharmacological Management

• Environmental factors
  – materials (like calendars, clocks) to reorient
  – adequate soft lighting
  – identify all individuals
  – limit number of different individuals
  – limit stimulation
  – sitters for safety
Pharmacologic Management

• Benzodiazepines
  – Drug withdrawal or anticholinergic excess

• Antipsychotics
  – Haloperidol
    • Best studied; oral and IV route; start low 0.5 mg IV
  – Other neuroleptics eg Chlorpromazine
  – Newer atypicals evidence scant so not first line
    • May be associated with fewer drug-induced movement disorders
Managing Adverse Effects

• Dystonic reactions
  – diphenhydramine

• Akathisia, parkinsonian reactions
  – benztropine

• Tardive Dyskinesia
  – stop medications
  – consult psychiatry
2 Roads to Death

THE DIFFICULT ROAD

Normal

Restless

Confused

Tremulous

THE USUAL ROAD

Sleepy

Lethargic

Obtunded

Semicomatose

Comatose

Dead

Hallucinations

Mumbling Delirium

Myoclonic Jerks

Seizures
Role of Terminal Sedation

• Accepted medical practice with evolving indications and guidelines
  • Goal is relief of suffering
  • May be reversible
  • Choosing drugs: sedative-hypnotics preferred
  • Documentation
Questions???
Report Out and Wrap Up
Surgical Palliative Care Immersion Training

Role Play

Stacie Pinderhughes, MD
Becky Ambivalence is a 54 year old woman with advanced cholangiocarcinoma. The cancer has spread to her liver, lungs and bone. She has bad pain which is well controlled at present with oral opioids. She has failed 3rd line chemotherapy and been hospitalized 3 times over 6 months with sepsis, altered mental status and most recently failure to thrive. She now requires assistance with most of her ADLs and is a poor candidate for continued chemotherapy. It is likely that her life expectancy is less than 6 months. She is married (30 years) to a supportive partner and has 3 adult children who know that her disease is very advanced and not curable. You have engaged in advance care planning with Becky A and she has designated her husband as her MPOA. You now begin discussion about CPR.
How to Break Bad News:

The Six-Step Protocol

Step 1. Start off well
Step 2. Find out how much the patient knows
Step 3. Find out how much the patient wants to know
Step 4. Share the information (Aligning and Educating)
Step 5. Responding to the patient’s feelings
Step 6. Planning and follow-through
Learning goals

Understand the need for palliative care

Who is a candidate for palliative care

When to recommend it

How to counsel the patient and family

How to provide good palliative care
Need for Palliative Care

Some patients are not surgical candidates

- End-stage adult failure to thrive
- End-stage malignancy with fracture
- Can’t tolerate surgery
- Most patients with prognosis < ~2 weeks
- Patients who are not interested in surgery
Need for Palliative Care

Some patients do poorly post-operatively

- Severe dysphagia with complications
- Anorexia/Cachexia/Adult Failure to thrive
- Terminal delirium
- Infectious complications
- Acute coronary events
- Acute cerebral vascular events
- Acute respiratory failure
- Complications of pressure ulcers
- Exacerbation of underlying illness
Need for Palliative Care

Patients does poorly interoperatively

- Rare if properly optimized
- Rarely a surprise if properly risk stratified
- Know the patient’s goal going into OR
When to consider limiting interventions

Prognosis is poor regardless of interventions
- Patient is not stable & not expected to stabilize
- Prognosis less than 2 weeks for non-surgical reasons
- End result is obviously poor
- Aggressive interventions are medically futile

Therapies are in conflict with advanced directives or known wishes

Burdens are excessive versus benefits
Common core values

Meaningful time with family & friends

Not suffering

Autonomy – control

Not being a burden
Engage the Family

Open, honest communication

Family meeting

Discuss the options

Reassure about comfort measures

Involve the other disciplines as appropriate
Hospice Care

Arrive at agreement

Life Expectancy

Discuss with Hospice program

Inpatient v. home care v. other options
Comfort Care – how to provide

Pain control
Quiet room
Good nursing care
Sedation is sometimes needed
Ongoing support
Medical team often attends
Surgical team continues to provide support
Discussion?
Wrap Up & Evaluation

Mustafa Raoof, MD