Integrative Pain Management-Physical, Emotional and Spiritual, Issues

Ann Berger, MSN, MD

Chief Pain and Palliative Care Service
National Institutes of Health Clinical Center

Objectives: Understand

- nature of palliative care services.
- nature of physical, emotional and spiritual pain
- assessment and management of various pain syndromes
- Complementary approaches to pain management

The Myths and Facts About Palliative Care

- Palliative Care **IS**:
  - A philosophy of care
  - The management of physical, emotional, social, and spiritual "suffering"
  - Best utilized at the onset of diagnosis and throughout the disease course
  - Symptoms related to a chronic, life-threatening, or terminal disease process
  - A collaborative effort of the Interdisciplinary team, patient, family, caregiver, and research team.
- Palliative Care **IS NOT**:
  - A treatment modality
  - Restricted to pain management
  - Utilized during end-of-life care only
  - Limited to cancer-related diagnosis
  - Paternalistic/maternalistic

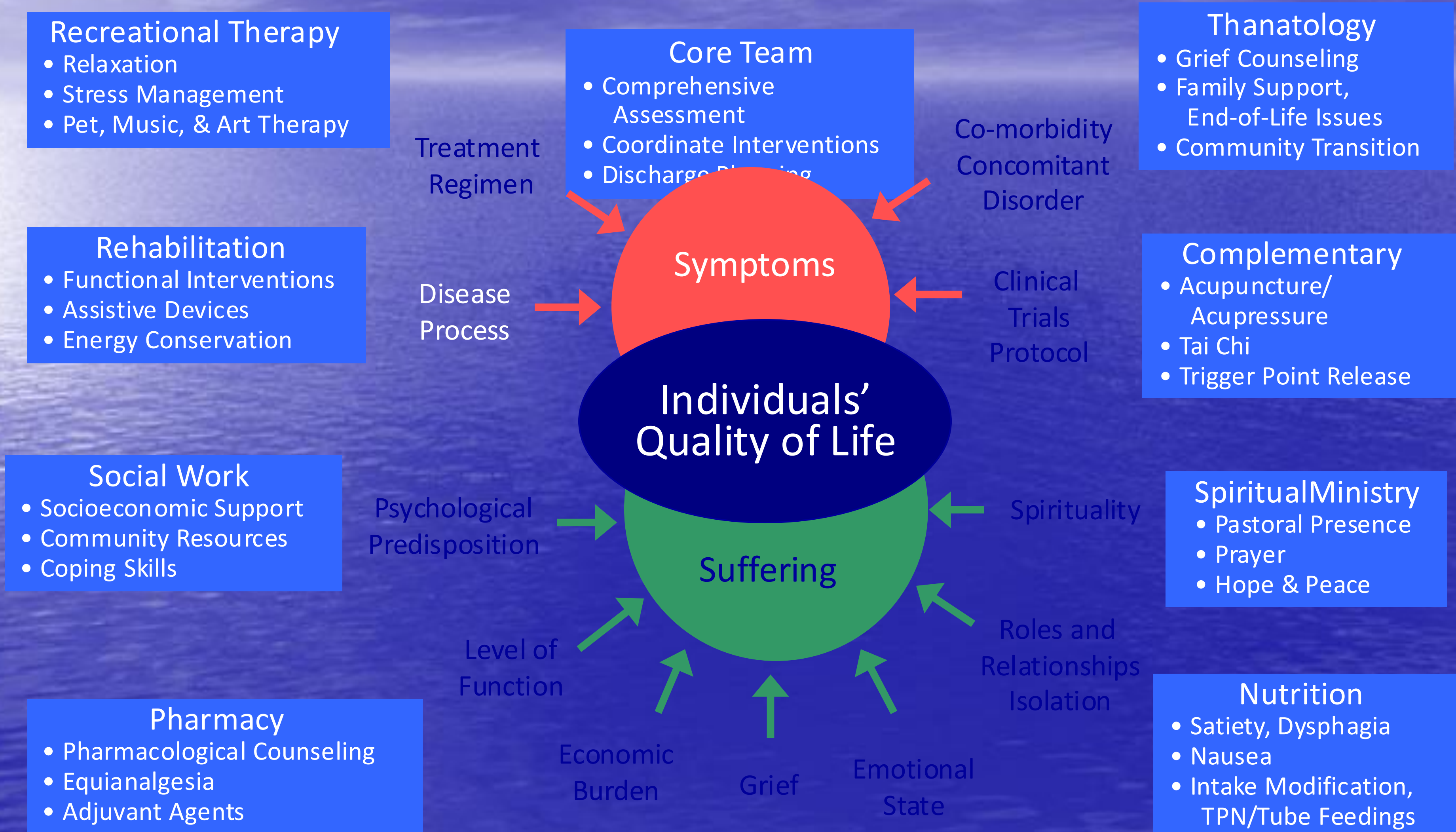
Palliative Care Philosophy

- To cure sometimes, to relieve often, and to comfort always
- Bridge science and humanism to provide competent and compassionate care
- Enable the patient and family to become “empowered” through education and support
- Provide early intervention of symptom management and coping skills

Palliative Care Philosophy

- Promote collaborative relationship-centered communication . . . "break down hierarchical relationships"
- Relieve suffering and improve quality of life
- Validate and disseminate information through research-based investigation and documentation
- Integrate palliative care services into mainstream of medical therapy

It takes a nurturing interdisciplinary team to practice the nature of palliative care



Essence of a Palliative Care Service

- Utilizing liaisons as integral interdisciplinary team members
- Providing palliative symptom management in conjunction with aggressive treatment modalities
- Ensuring continuity of symptom management /support throughout the stages of the disease process & across healthcare settings
- Implementing integrative medicine

Quality of Life
Palliative Care Symptoms

- Lack of energy (74.2%)
- Worrying (70.9%)
- Feeling sad (66.1%)
- Pain (62.7%)
- Feeling nervous (61.9%)
- Drowsiness (61.0%)
- Dry mouth (56.5%)
- Difficulty sleeping (53.7%)
- Feeling irritable (48.3%)

Quality of Life
Palliative Care Symptoms

- Nausea (45.5%)
- Dizziness (24.4%)
- Loss of appetite (45.5%)
- Diarrhea (24.3%)
- Sexual problems (23.9%)
- Shortness of breath (23.5%)
- Vomiting (21.0%)
- Hair loss (17.8%)
- Urination problems (15.7%)

Portenoy, R. K., Thaler, H. T., Kronblith, A. B., et al: "Symptom prevalence, characteristics and distress in a cancer population." *Qual Life Res 1994*, 3:183-189.

Acute vs. Chronic Pain

Acute

time course-transient
features-fight or flight
pupillary dilatation
sweating

increased RR

increased HR

Increased shunting of blood from viscera to muscles

Chronic

vegetative
Sleep disturbances
anorexia
decreased libido

anhedonia
constipation
Somatic pre-occupation
Personality change
lethargy

Pathophysiologic Mechanisms of Pain

Type	Cause	Characteristics
Somatic	Nociceptor activation	Aching or gnawing, localized
Visceral	Nociceptor activation	Aching, vaguely localized, often referred
Neuropathic	Destruction of a nerve	Severe or dull shooting pain on background of burning, aching sensations

Somatic Nociceptive Pain

- Responsive to:
  - narcotics
  - chemical or surgical blockade of proximal innervation provides effective analgesia and anesthesia

Key Points of Comprehensive Assessment

- Recognize pain and its location, subjective quality, and severity
- Assess not only the type and intensity of pain but how it impacts life of patient
- Use pain assessment to determine the pathophysiology and select treatment strategies
- Determine the best time(s) to assess and reassess the pain
- Establish comfort/function goals with the patient

Vallerand. *Semin Oncol Nurs* 1997;13:16.
McCaffery and Pasero. *Pain Clinical Manual*; 1999:67.

Pain Management

- Pharmacotherapy
  - analgesic ladder
    - opioid analgesics
    - nonopioid analgesics
    - adjuvant analgesics
- Adjuvant techniques
  - noninvasive
    - psychosocial interventions
    - relaxation techniques
    - distraction techniques
  - invasive
    - nerve blocks
    - surgical or chemical ablation
    - spinal opioid infusions

Jacox et al. *Management of Cancer Pain. Clinical Practice Guideline Number 9*; 1994:39.
Arbit. *Assessment and Treatment of Cancer Pain*; 1998:213.

Extended Release and Long Half-Life Opioids

- Longer half-lives (12-24 hours)
- Release drugs over 8, 12, 24, 72 hours.
- Extended release tablets (do not crush)
- Extended release capsules (may open)
- Extended release patches

Opioids for Moderate to Severe Pain

Long Acting

- Morphine (MS Contin, Oramorph SR, Kadian
- Oxycodone (Oxycontin)
- Fentanyl (Duragesic)
- Methadone (Dolophine)
- Levorphanol (Levo-Dromoran)

Opioids for Moderate to Severe Pain

Short Acting

- Morphine (Roxanol, MSIR)
- Oxycodone (Roxicodone, Oxy IR)
- Fentanyl (Actiq)
- Hydromorphone (Dilaudid)

Other Routes

- Continuous Subcutaneous Infusion (CSCI)
- Intravenous Infusion
- Intraspinal Infusion
  - Epidural
  - Intrathecal
  - Intraventricular
- Direct Neuro-Axial Dosing
  - Epidural
  - Intrather
cal (spinal)

Methadone

- Consider for high tolerance, hyperalgesia, and neuropathic pain, or when cost is significant barrier.
  - Lacks neuroactive metabolites
  - Has two nonopiate analgesic receptor activities:
    - Prevents MAO reuptake in periaqueductal gray
    - Prevents N-methyl-d-aspartate (NMDA) receptors
  - Negative: long half-life and association with addiction

Transdermal System

- Fentanyl
  - 100 times more potent than Morphine.
    - Advantages of using fentanyl in transdermal system:

      -lipid solubility

      -capillary penetration

      -high analgesic potency

WHO IS NOT APPROPRIATE FOR TRANSDERMAL FENTANYL?

- Patients who are:
  - Anorexic or Cachexic
  -Sweating profusely
  -Experiencing “Fluid in Funny Places”
    -Ascites
    -Pleural Effusion
    -Peripheral Edema
  -Currently taking less than 50 mg of Oral Morphine or the equivalent.

Breakthrough Pain

A transitory exacerbation of pain that occurs on a background of otherwise stable pain in a patient receiving chronic opioid therapy

Portenoy, R (1990)

BREAKTHOUGH DOSING

- Treatment of pain at rest or with movement.
- Immediate release preparation of same medication.
- Dosing: 10-20 % of 24 hour dose of opioid.

  -PO q 1-4 hours PRN

  -SQ q 15-30 minutes PRN

  -IV q 5-15 minutes PRN

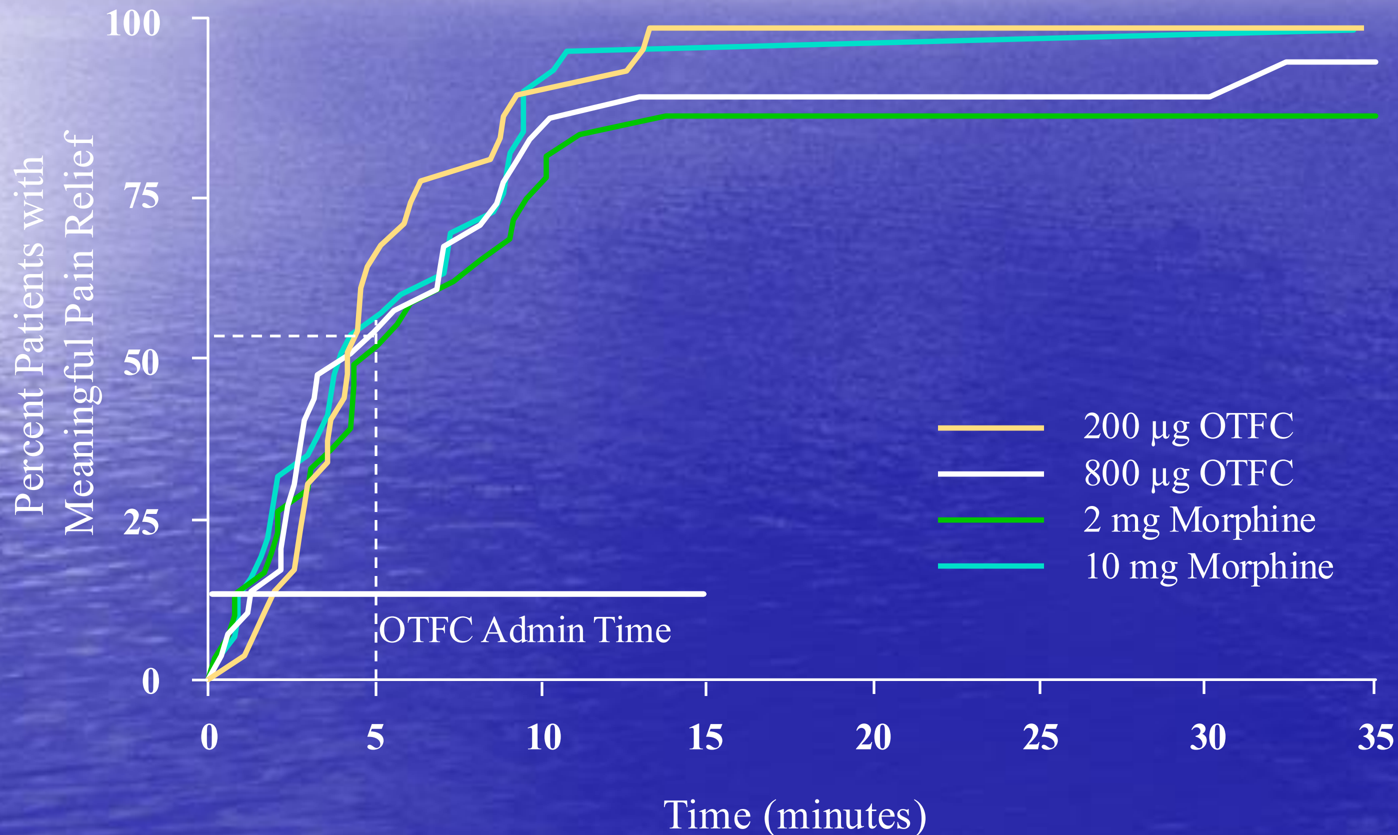
OT Fentanyl Use:
Optimal Absorption Through Oral Mucosa

- Rate of consumption: 15 minutes.
- Saliva production: enough for dissolution.
- Swallowing of drug: minimize.
- Area of mucosa: buccal.
- pH of mouth: avoid low pH fluids i.e.. OJ

OT Fentanyl Bioavailability

- 50% Total Bioavailability
  - 25% Rapid OT absorption.
  - 25% Slow GI absorption.
  - 50% Lost to liver metabolism or not absorbed.

Onset of Pain Relief: OTFC vs IV Morphine



Adapted from Sevarino FB, et al. *Anesth Analg* 1997;84:S330.

Management of Common Opioid Side effects

- Constipation
  - prophylactic use of laxatives and stool softeners
- Nausea and vomiting
  - neuroleptics, metoclopramide, cisapride, antivertigenous drugs
- Sedation
  - discontinue other CNS depressants
  - add psychostimulants
- Respiratory depression
  - monitor if not severe; carefully titrate naloxone if severe

Neuropathic Pain

- involves neuronal malfunction
- after insult to distal or proximal neural element
- marked by aberrant receptor function or sensory processing resulting in a sensation of pain

Neuropathic Pain- common examples

- Metabolic
  - Diabetic neuropathy
- Infectious
  - Herpes zoster
- Traumatic
  - Post-surgical nerve impingement
  - Brachial or lumbosacral plexopathy
  - Post CVA neuropathy
  - Phantom limb phenomena
  - Post spinal cord injury pain
- Chemotherapy induced

Neuropathic Pain

- Less sensitive to standard analgesic regimens than somatic pain
  - NSAID's usually ineffective
  - opioids usually required in large doses
  - tolerance quickly develops
- Adjuvant analgesics may be helpful

Neuropathic Pain- Adjuvant Analgesics

- Tricyclic antidepressants
- Anticonvulsants
- Clonidine
- Corticosteroids
- Local anesthetics
  - Mexilitine

Procedures

Intractable, local pain syndromes

- Regional neurolytic blocks
- Ablative; Radiofrequency

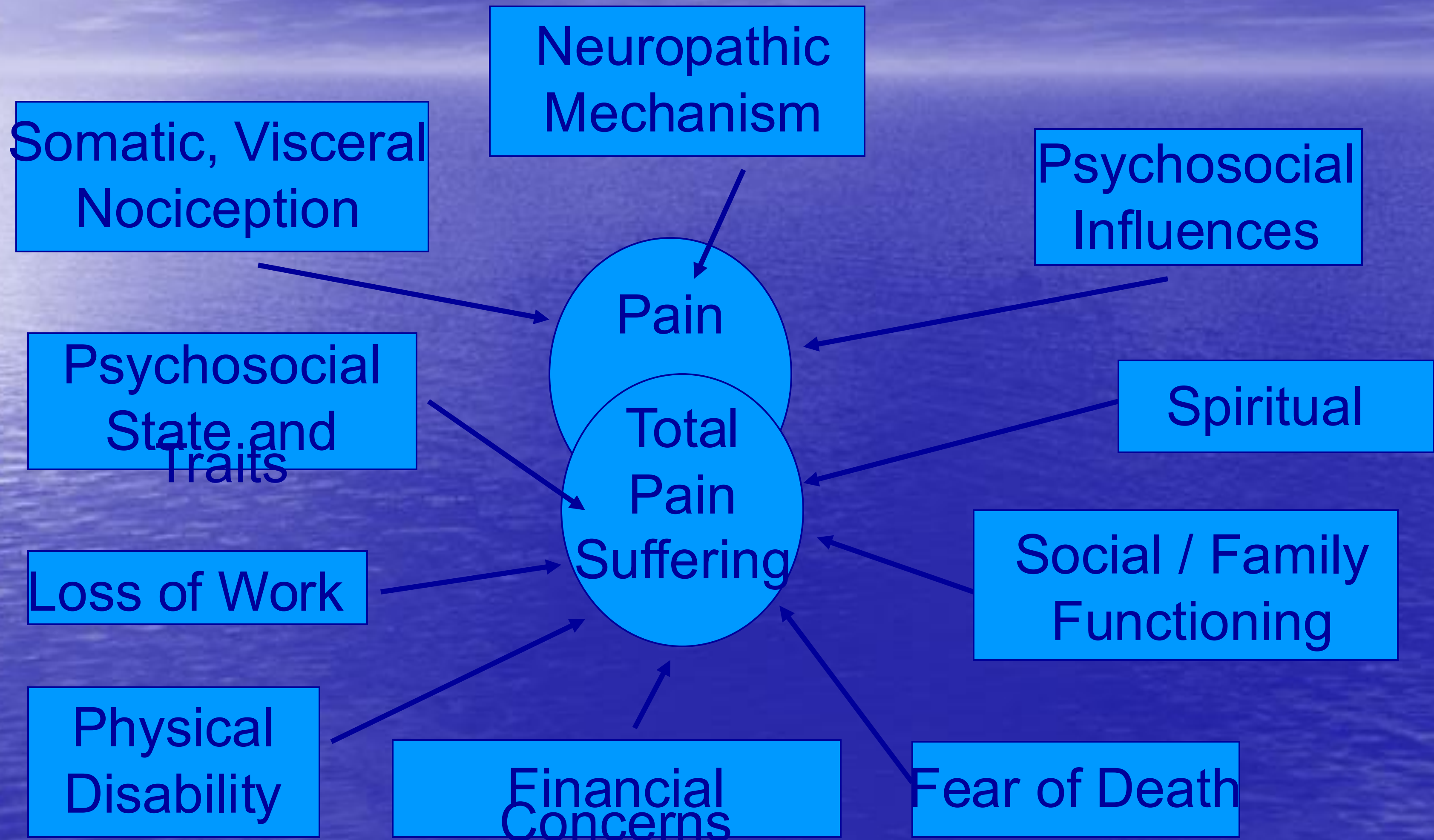
Central analgesia

- Intrathecal/epidural

Complementary Approaches

- Acupressure
- Acupuncture
- Massage
- Trigger Point
- ProTens

Nature of Pain



Emotional Pain “ hurts all over”

Most common palliative care symptoms

Anxiety; may present as sleeplessness, reluctant to be left alone or overt fright

Anticipatory Anxiety; previous negative experience becomes overwhelming

Treatment: relaxation & imagery, acupressure, massage, music therapy, hypnosis…. then maybe pharmacotherapy such as lorazepam, haloperidol

Emotional Pain;

Care Giver Burden "communication, communication, communication"

Spirit of cooperation

Complex family dynamics emerge

Support to work through accumulated emotions

Can not take away all of the symptoms all the time

Imposing own expectations

Sense of presence is the very best medicine

Spirituality

- The part of self where search for meaning takes place.
- Distinction between religion and spirituality
- Intimate connection with life through family, home, friends, leisure and work

Spirituality

Spiritual Assessment

Spiritual History Developed for Physicians

F = Faith & Belief

"Do you consider yourself spiritual or religious?" or "Do you have spiritual beliefs that help you cope with stress?"

Spiritual History

I = Importance

What importance does your faith or belief have in your life? Have your beliefs influenced how you take care of yourself in this illness? What role do your beliefs play in regaining your health?

Spiritual History

C = Community

Are you part of a spiritual or religious community? Is this of support to you and how? Is there a group of people you really love or who are important to you?

Spiritual History

A = Address in Care

How would you like me, your health care provider, to address these issues in your health care?

Spiritual Pain

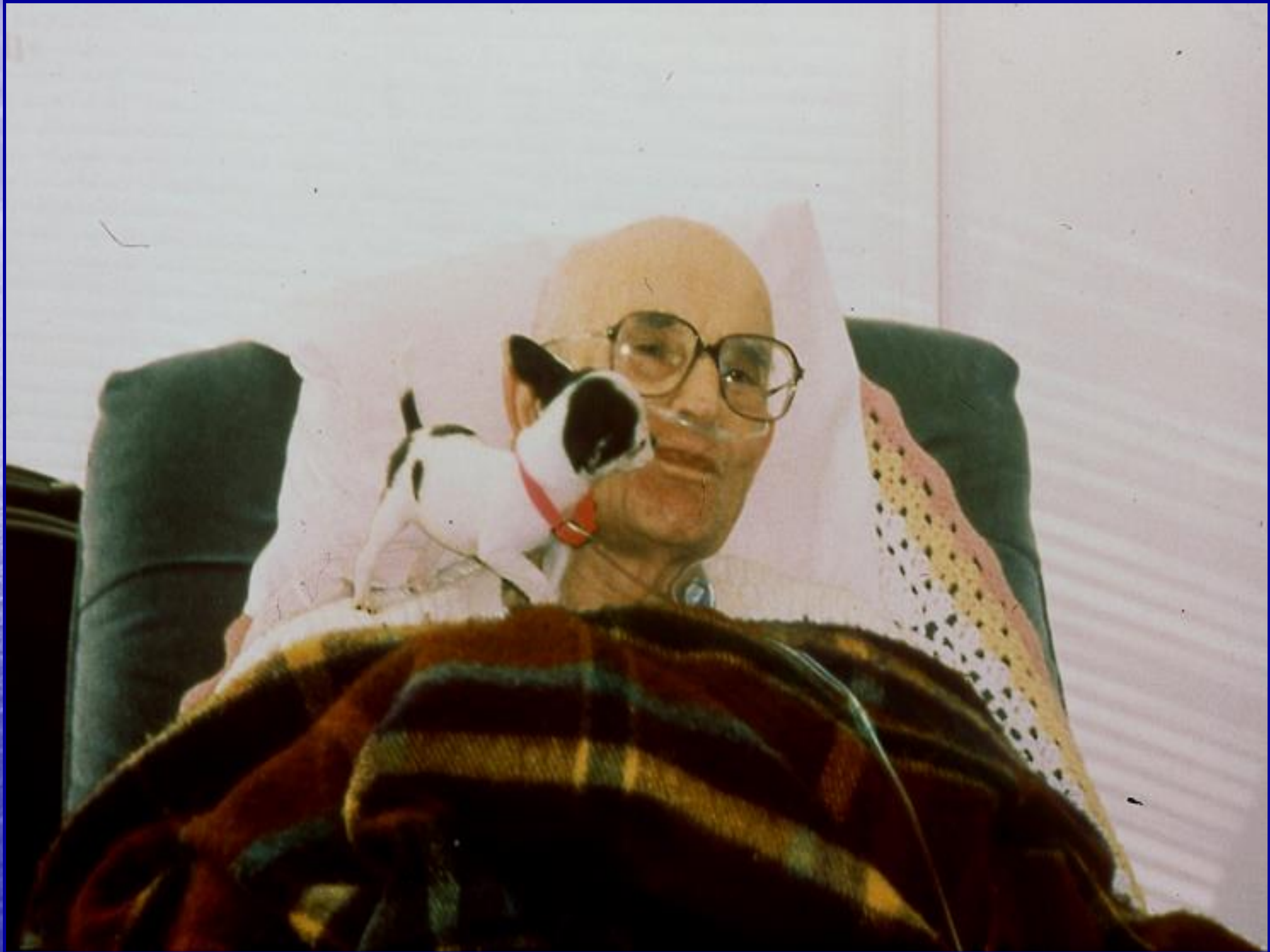
Disconnection threatened by or challenges the individuals ability to make meaning

Treatment plan may include:

- Chaplain interventions
- Labyrinth; prayerful reflection and focus following an octagonal/circular, interchanging pathway
- Mandalas'; a sacred circle of meditation

Non Pharmacological Methods of Pain Management

- Distraction
- Hypnosis
- Relaxation Exercise
- Biofeedback
- Guided Imagery
- Acupuncture
- Meditation
- Pet Therapy
- Art Therapy
- Music Therapy
- Reiki
- Tea Party



Biofeedback

- Training technique used for relaxation and self-regulation. First and foremost, it provides direct feedback to client of their bodily processes.
- Goals:
  - Self regulation
  - Decrease anxiety
  - Educational experience providing validation and guidance for self-regulation

Guided Imagery

1. cognitive tool to achieve desired therapeutic outcome
2. method of deliberate use of imagery to modify behavior, perceptions, feelings, or internal psychological state
3. A process that uses thoughts to evoke and use the senses (thinking in pictures instead of in words)

Guided Imagery- Benefits

- Decrease muscular tension
- ‘Reinforces the message’ to Relax
- Pain control
- Amelioration of other symptom
- Distracts the mind (from bothersome symptom or state to reduce suffering)
- Accesses feelings

Hypnosis

- Purposeful altered state of consciousness
  - Focus of attention
  - Ability to accomplish psycho physiologic changes which are otherwise more difficult to accomplish
  - Often accompanied by relaxation

Hypnosis Benefits/Uses

- Accrue from direct response to suggestion
- Pain, anxiety, sleep, nausea and physical symptoms
- Addiction, habits, phobias
- Coping with internal or external stressors or stimuli

Reiki

Universal life force energy or spirit

Conveyed through touch and intention

It can do no harm

Follows 7 chakras; it is not given bv the healer, but rather accepted by the healee

The Secret to Success In Palliative Care

- “Back to the Basics” of bedside caring
- One success at a time, “actions speak louder than words”
- Teach by “recommendation rather than prescription”
- Palliate staff as well as patients/families

CNST3-2169 **NATIONAL INSTITUTES OF HEALTH CLINICAL CENTER**
04/14/03 03:51 PM QAREQ4

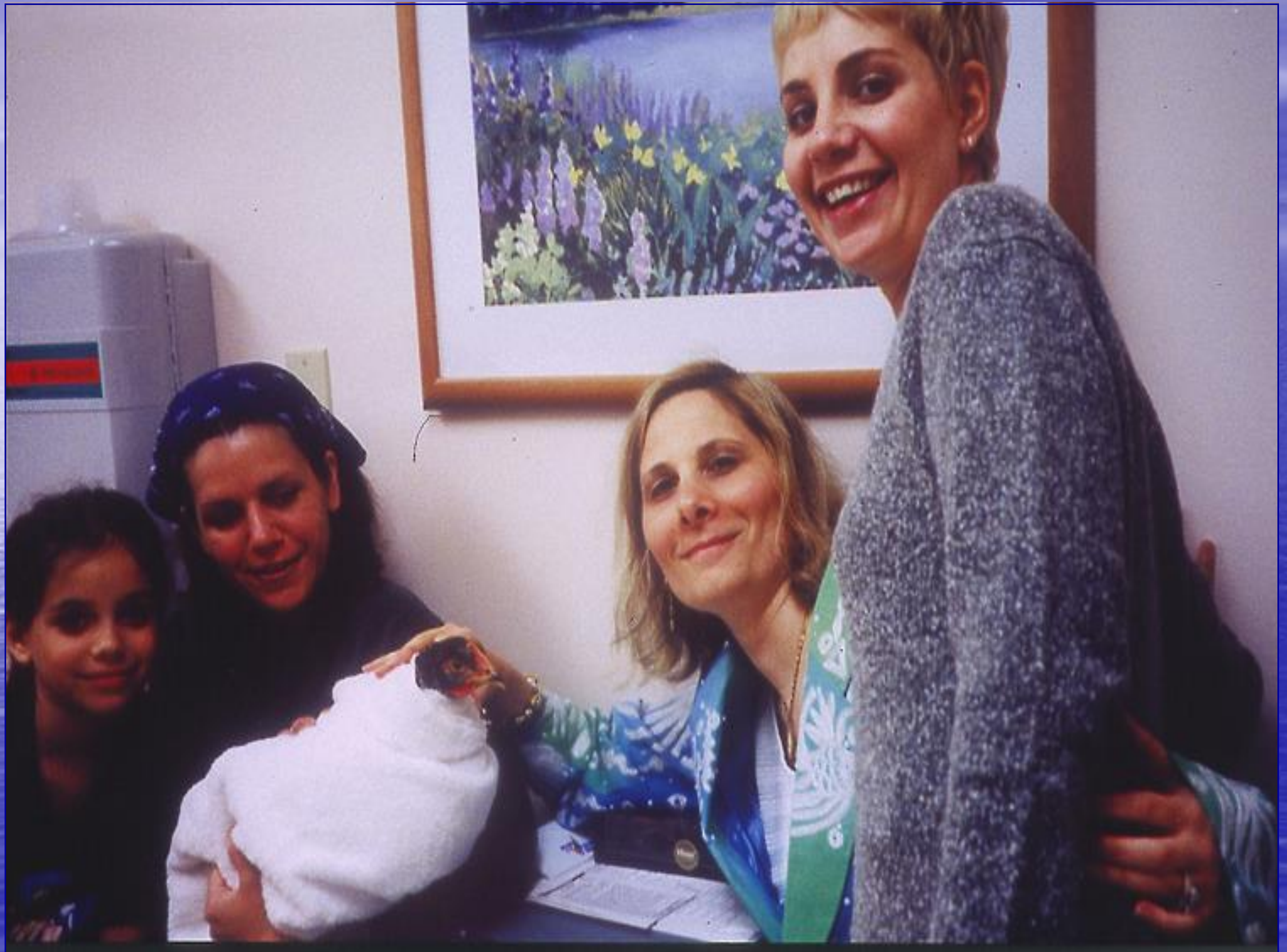
02E23A
37-44-64-4 DOB:04/01/52 AGE:51 SEX:F
ATTENDING: ALEXANDER,H. R. INST/BR:C SU

PAIN MANAGEMENT

DX: MESOTHELIOMA PR #: 99-C-0128 REQUEST#: Y104-0053
HOME#: 708-784-0603 BUS.#: 708-246-7800

ENTERED BY: GROVER,AMELIA C MD

119.01 PAIN & PALLIATIVE CARE, ROUTINE.
REQUESTING PHYSICIAN: GROVER.
DIAGNOSIS PERTAINING TO THIS CONSULT ORDER: PERITONEAL
MESOTHELIOMA TO UNDER.
REASON FOR CONSULT: ALTERNATIVE WELLNESS THERAPY.
BEDSIDE: YES, <04/14/03>



"You can't die cured, but you can die healed. Healing is about a sense of wholeness as a person, and that wholeness includes understanding our mortality, our place in the world—death is not a betrayal of life, but a part of it."

- Dan Frimmer M.D.
- *TIME* Magazine, 2000

NIH

"You matter because you are you. You matter to the last moment of your life, and we will do all that we can not only to help you die peacefully, but also to live until you die."

- Dame Cicely Saunders