

Pain Management Concepts

Categories of Pain

CE Broker #



Our Values

To Our Patients: With compassion and a holistic approach, Cornerstone Hospice and Palliative Care employees, volunteers and contracted staff will render the highest quality of care and support:

- Preserving hope, dignity, confidentiality and patient autonomy
- Respecting individuality, personal choice, cultural diversity and individual spiritual beliefs
- Recognizing and supporting the strengths of patients and their significant others
- Delivering services regardless of ability to pay
- Assuring excellence in symptom control and psychological and spiritual support
- Respecting and preserving relationships with attending physicians

Objectives

- Explain “Total Pain”
- Identify the categories of physical pain for appropriate pain management
- Define the differences between acute and chronic pain
- Identify nociceptive and neuropathic pain as it may occur in cancer and non-cancer patients with a terminal prognosis
- List physical and non-physical causes of pain

Medicare Hospice Benefit

- Terminal Illness: Definition: A medical prognosis of a life expectancy of 6 months to a year or less if the illness runs its normal course.
- Certification of the terminal illness: of an individual who elects the hospice “shall be based on the physician’s & the medical directors clinical judgment”

Medicare Hospice Benefit

Covers:

- Medications
- Durable Medical Equipment (DME)
- Services of the Inter-disciplinary Team (IDT)
- Supplies
- Care Connection—24hrs a day/7 days a week access to on call support

Medicare Hospice Benefit

Referrals are sent to the Cornerstone Hospice Referral Center

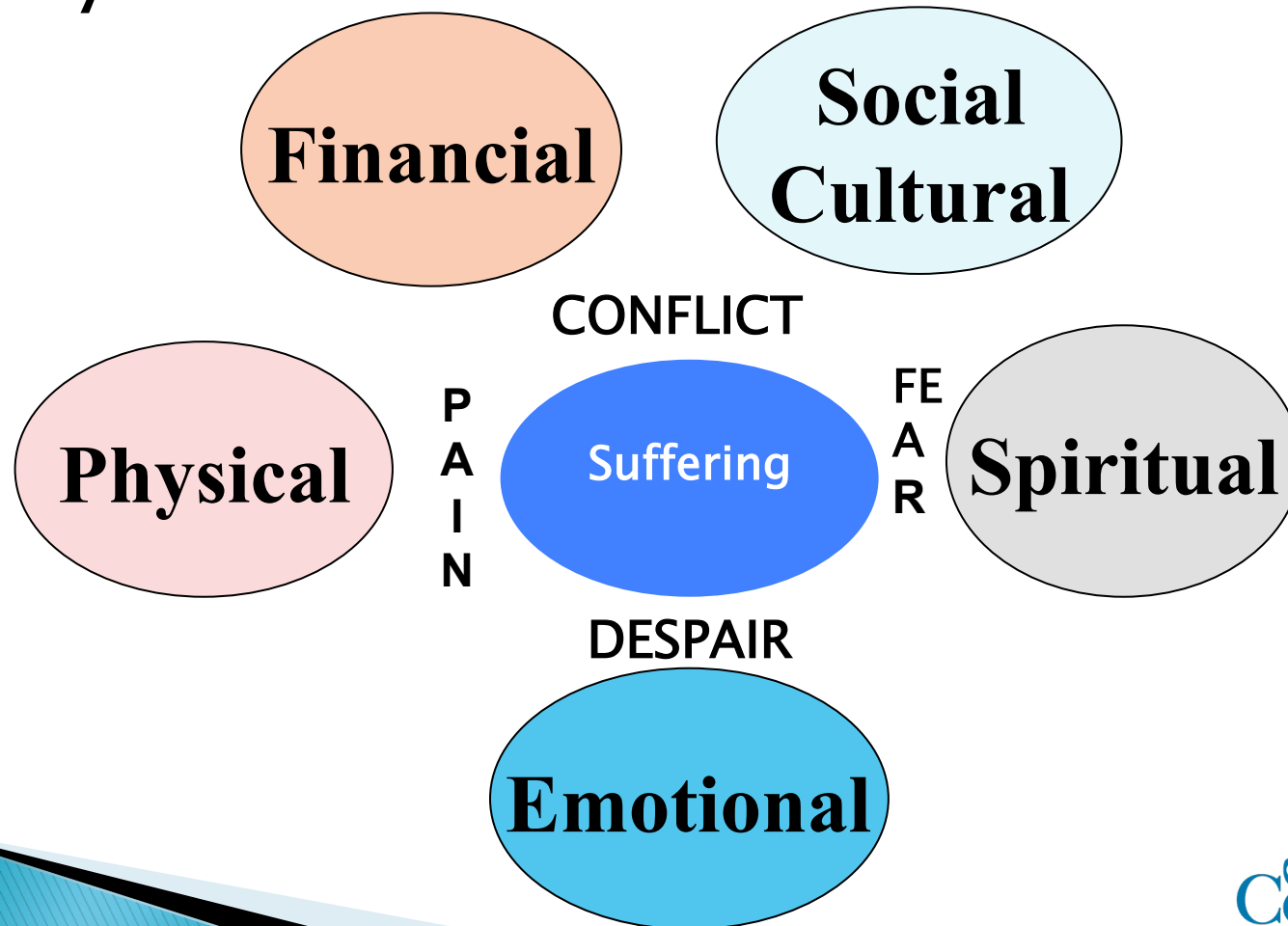
- Physicians
- Self referral
- Facilities
- Hospitals



The benefit is initiated following an initial meeting to review services, sign consents, and develop a patient centered care plan

Medicare Hospice Benefit

- A flexible set of services provided by the IDT to address Total Pain

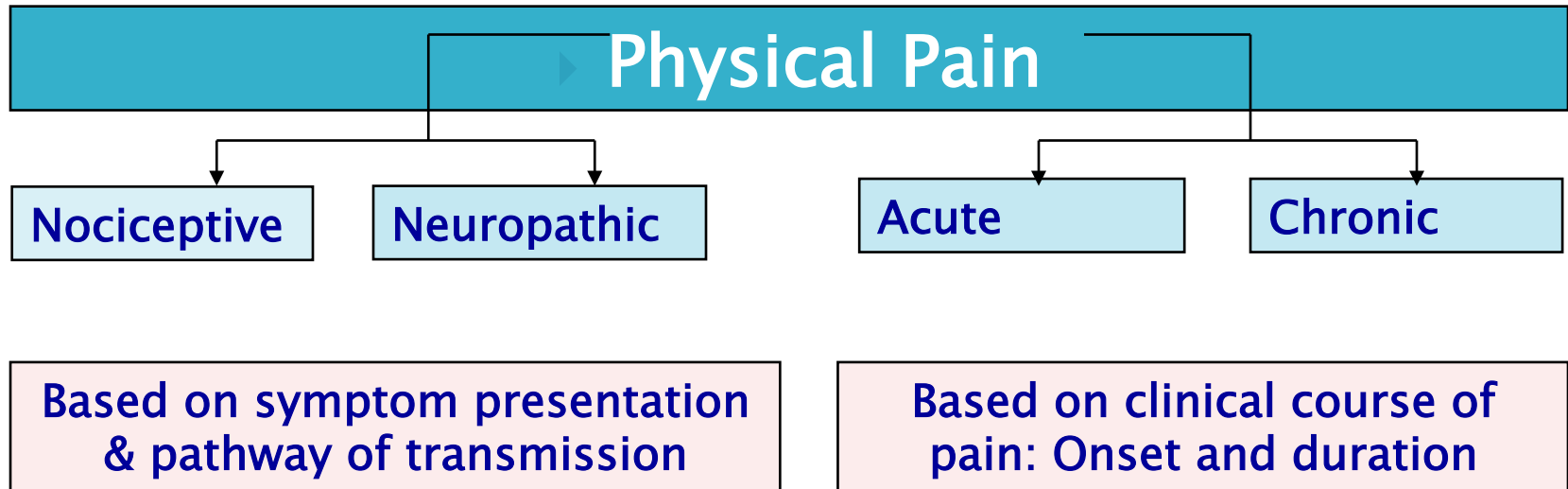


Understanding Pain

- In order to understand pain, you must first understand the pathophysiology



Categories of Physical Pain



✦ Failure to identify patient's pain according to the appropriate category is one of the major causes of under treated pain

Nociceptive Pain Subtypes

➤ Somatic vs Visceral

➤ Symptoms

- Somatic: Localized, aching, throbbing, gnawing
- Visceral: Poorly localized, deep, aching, crampy pressure

➤ Cause

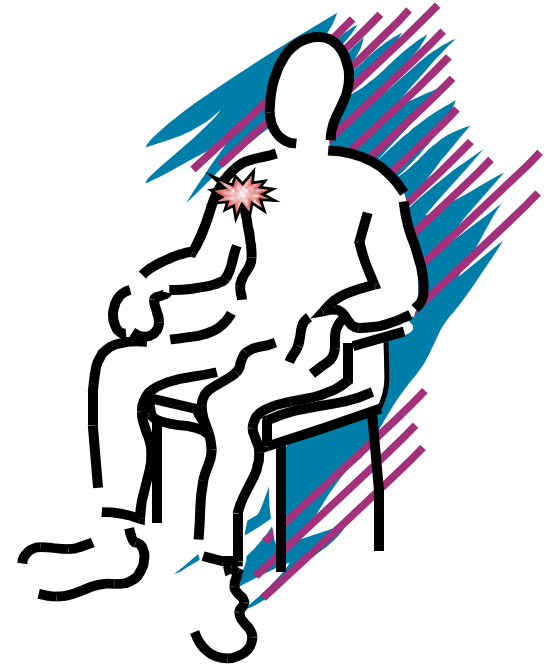
- Somatic: Activation of nociceptors in tissue
- Visceral: Activation of nociceptors from stretching, distention, or inflammation

➤ Examples

- Somatic: Bone Metastasis, tissue injury
- Visceral: Liver injury, bowel obstruction

Somatic Pain

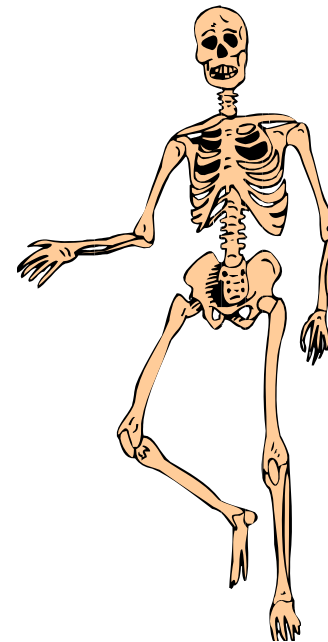
- Is well localized:
 - Pain is felt in the immediate area where the tissue is being injured
 - Related to Cancer
 - Tumor invasion of soft tissue



Bone Pain

- Subset of somatic pain
- Cancer-related:
 - Direct cancerous infiltration of the bone
 - Mediated by prostaglandin
- Non Cancer-related

80% of all
bone metastases
occur in the
axial skeleton



Bone Pain, continued...

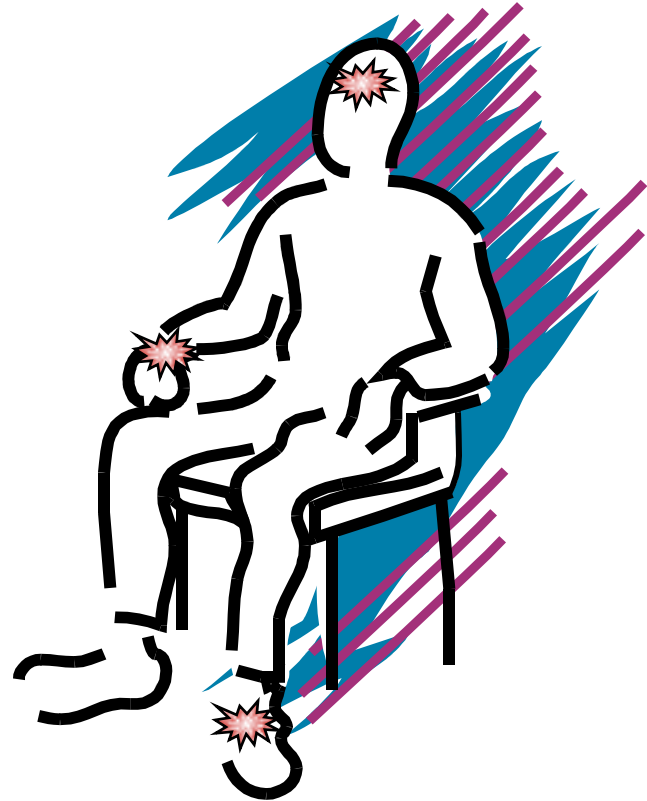
- Described as either:
 - Persistent ache spread widely which is usually unrelated to position or activity
 - OR intermittent localized piercing pain related to position and weight-bearing activity
- May require the use of steroidal anti-inflammatory agents

Bone Metastases

- Cancers most likely to metastasize to bone:
 - Breast
 - Bronchogenic
 - Myeloma
 - Melanoma
 - Prostate
 - Kidney
 - Thyroid

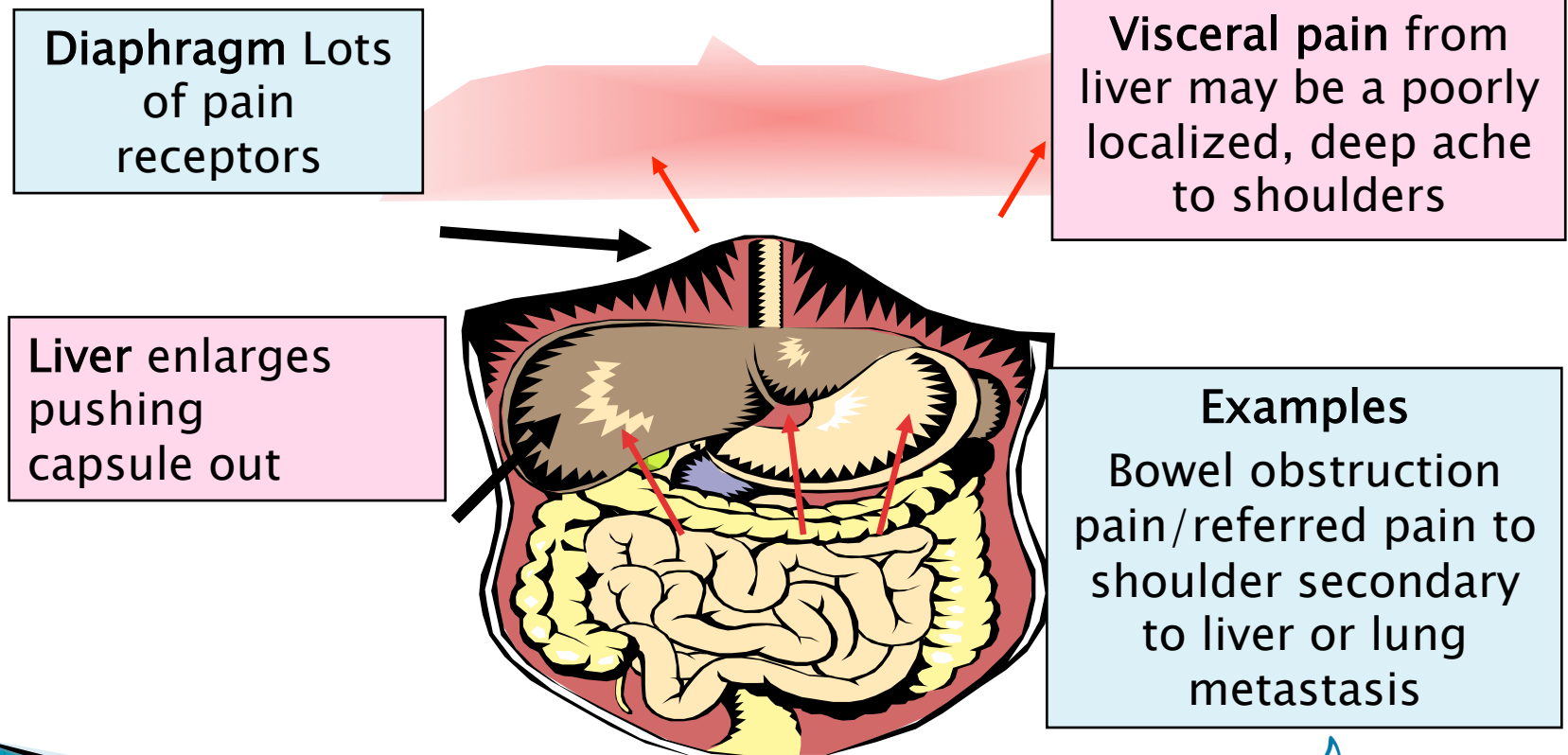
Non-Cancer Somatic Pain

- Non Cancer Causes:
 - Pressure Ulcers
 - Rheumatoid Arthritis
 - Osteoarthritis
 - Sickle Cell Anemia
 - Chronic Osteomyelitis
 - Chronic Back Pain



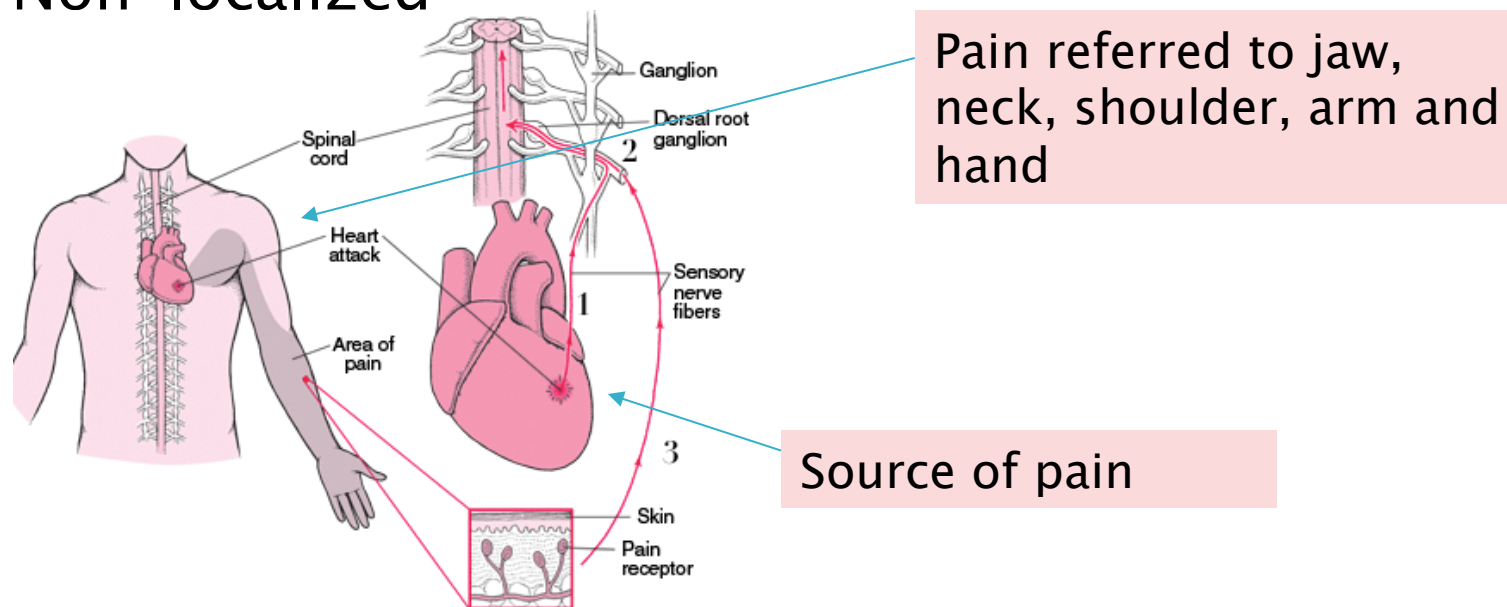
Visceral Pain

- Cause: Activation of nociceptors resulting from stretching, distension or inflammation



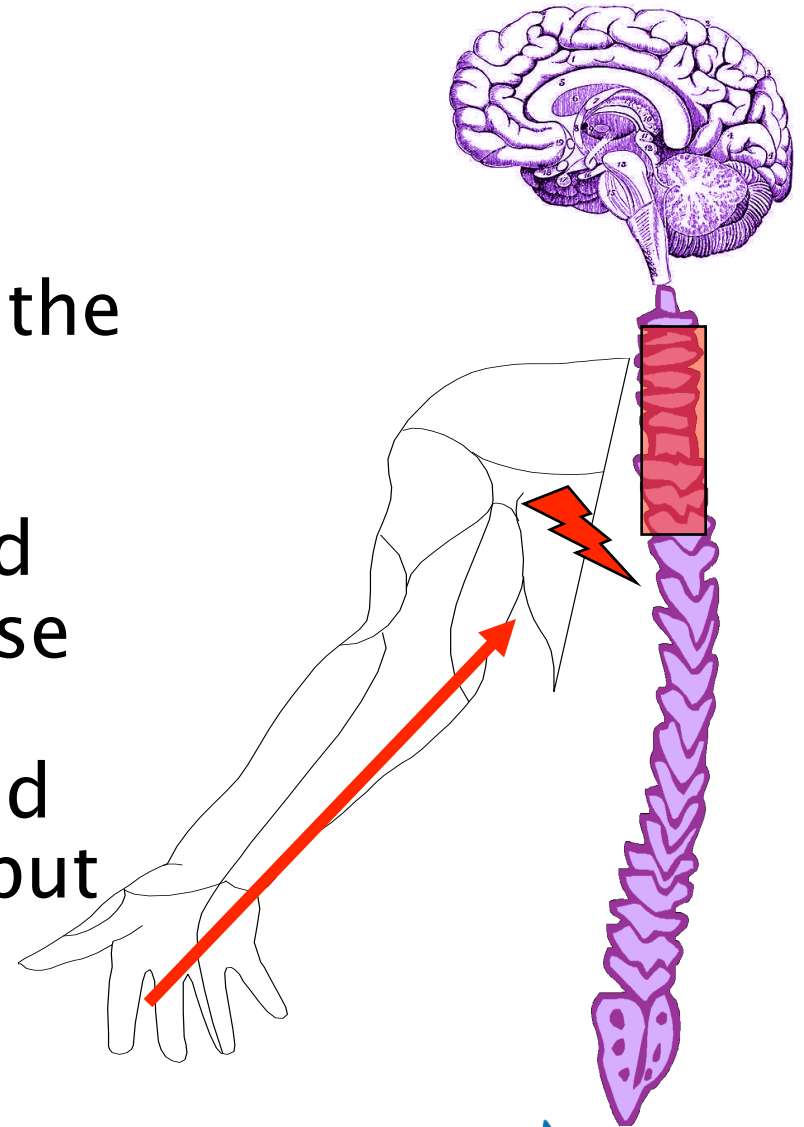
Visceral Pain in Non-Cancer Patients

- Chest pain in a patient with end-stage cardiac disease
 - Pain symptoms: deep, aching, crampy, pressure
 - Non-localized



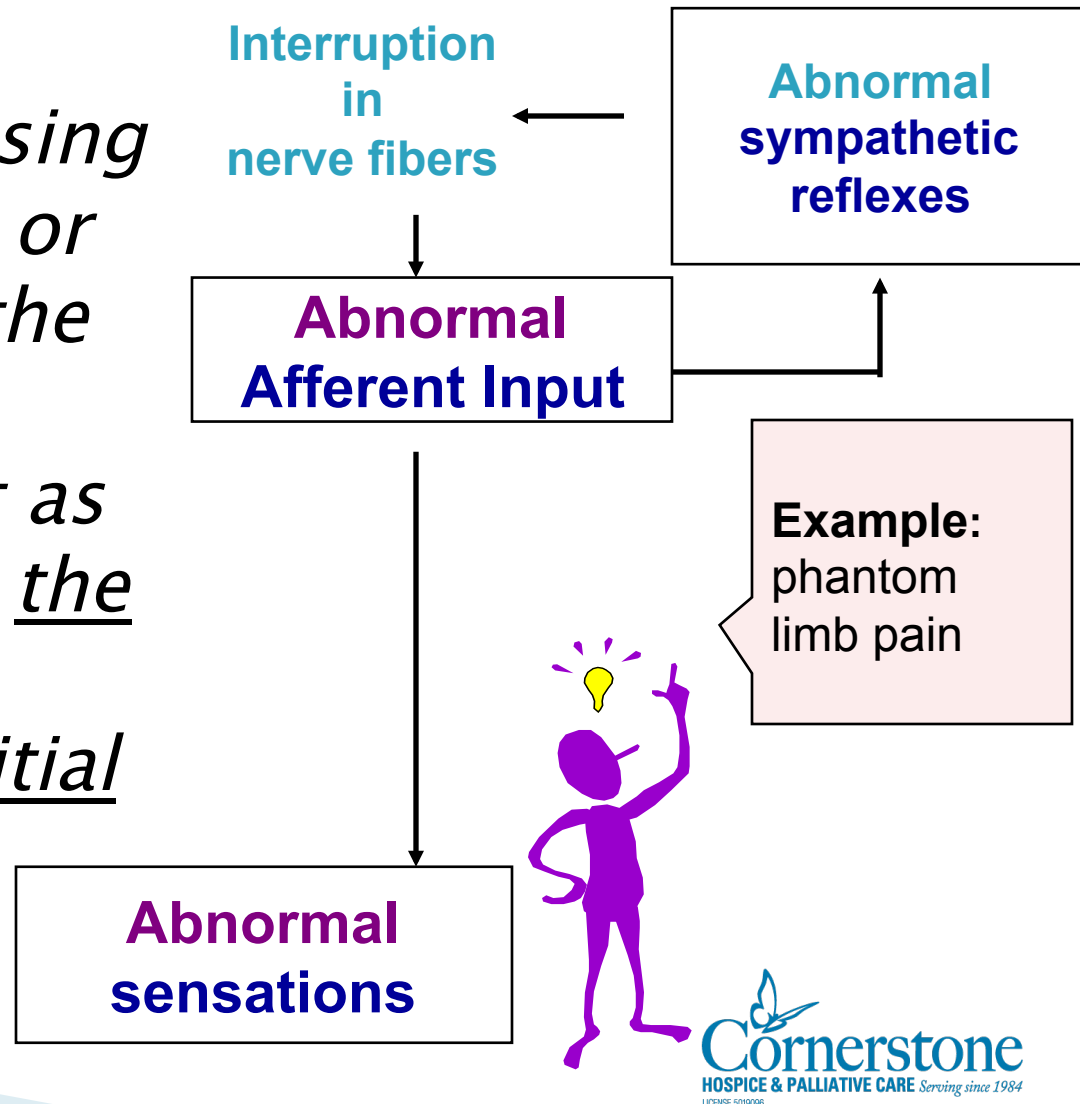
Afferent Nerve Pain

- Afferent nerves are sensing nerves, telling the brain what is going on through feeling, touch, movement, and hot and cold in the body. If these nerves are injured by disease, they don't send their normal signals – but ones we interpret as neuropathic pain



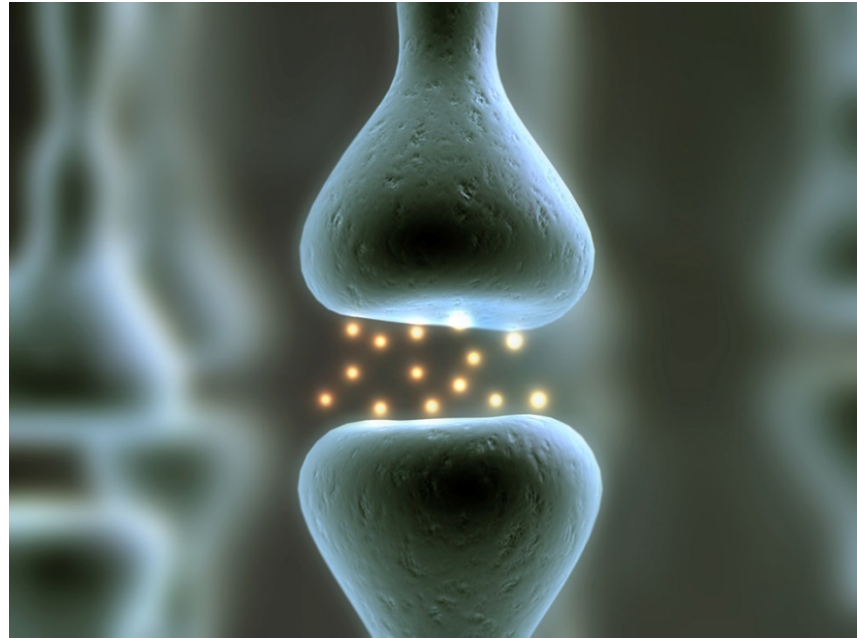
Neuropathic Pain

- *When there is a disorder in processing caused by disease or injury to a nerve, the brain begins to interpret the input as neuropathic pain– the sensation can last longer than the initial injury*



Neuropathic Pain

- Quality
 - Burning
 - Shooting
 - Piercing
 - Stabbing
 - Electric shock
 - Pins & needles
 - Painful numbness



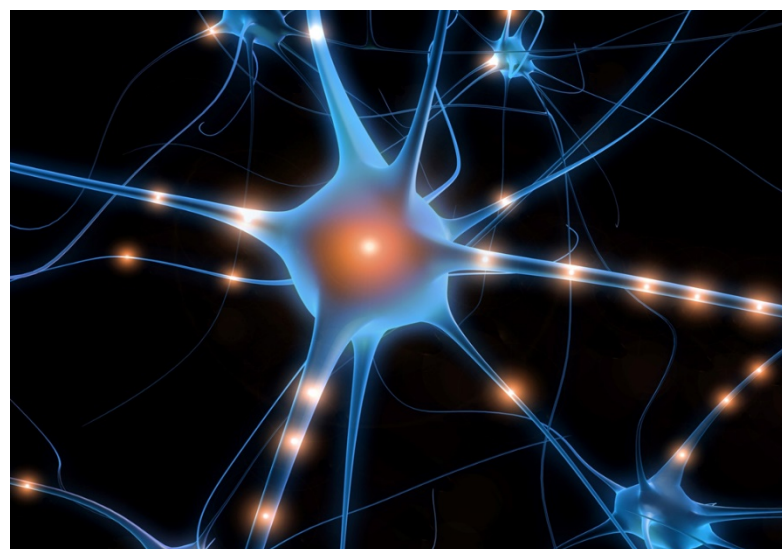
Causes of Neuropathic Pain

- Direct tumor invasion
 - Metastatic involvement of the spine is the most common cause of compression in advanced cancer
- Treatment-induced nerve injury
 - Chemotherapy/radiation therapy
 - Surgery



Neuropathic Pain, continued

- Infection
 - Herpes zoster with post-herpetic neuralgia
- Metabolic or chemical imbalance
 - Diabetes
 - HIV
 - ETOH neuropathy



Neuropathic Pain Treatment

- Treatment
 - Less sensitive to opioid than nociceptive pain
 - Not necessarily resistant
- Adjunctive Medications
 - Antidepressants
 - Anticonvulsants
- Opioid
 - May have additive effect

Clinical Categories of Pain

- Acute Pain
 - Well-defined temporal pattern of onset
 - Subjective and objective physical signs and hyperactivity of autonomic nervous system



Chronic Pain

- Persists for at least 6 months
- Should be redefined in patients with terminal disease, since pain may be caused by stimulus that is not expected to go away, regardless of time frame
- Often no objective or subjective signs of acute pain from adaptation of autonomic nervous system

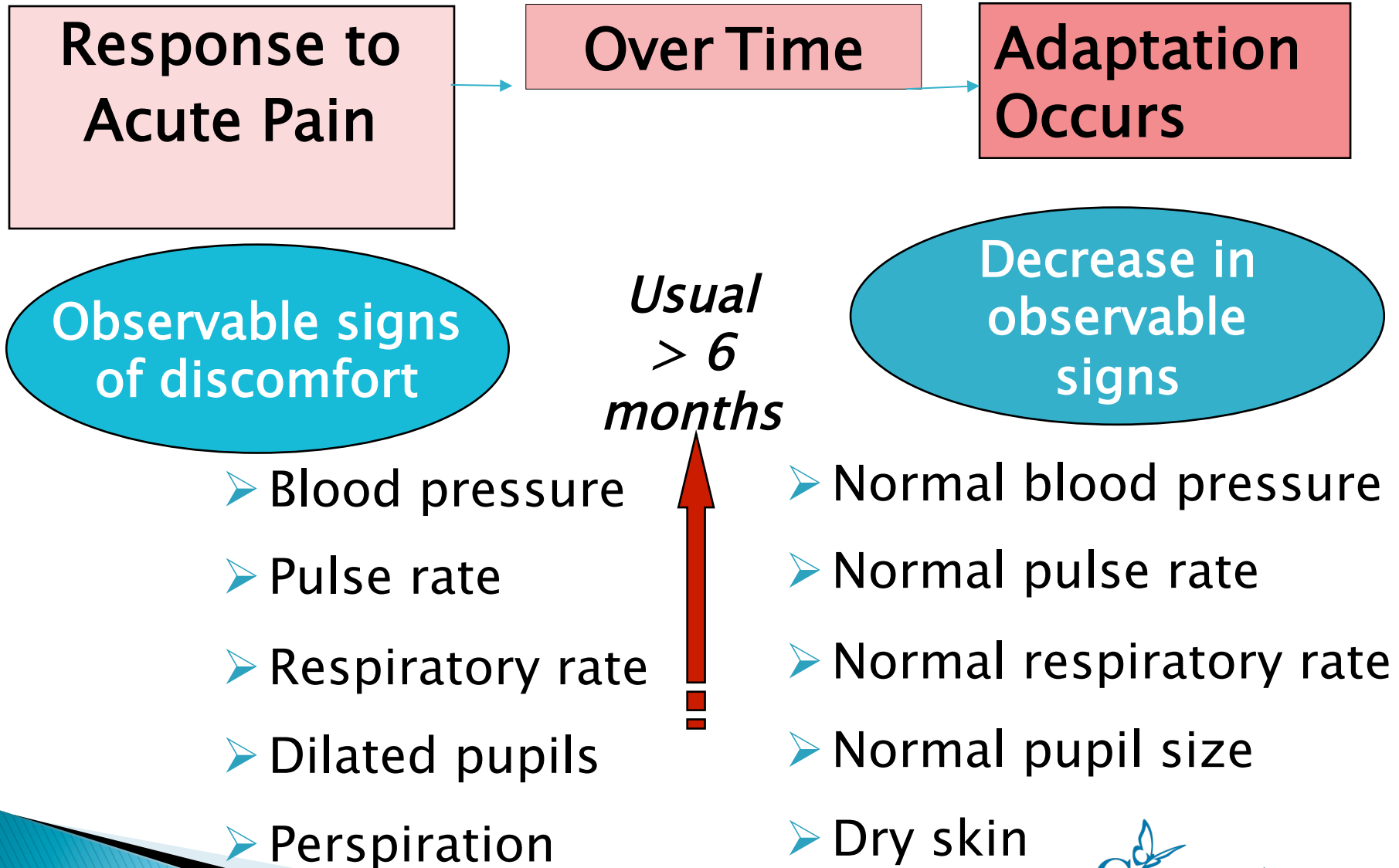
Acute vs Chronic Pain

Acute:

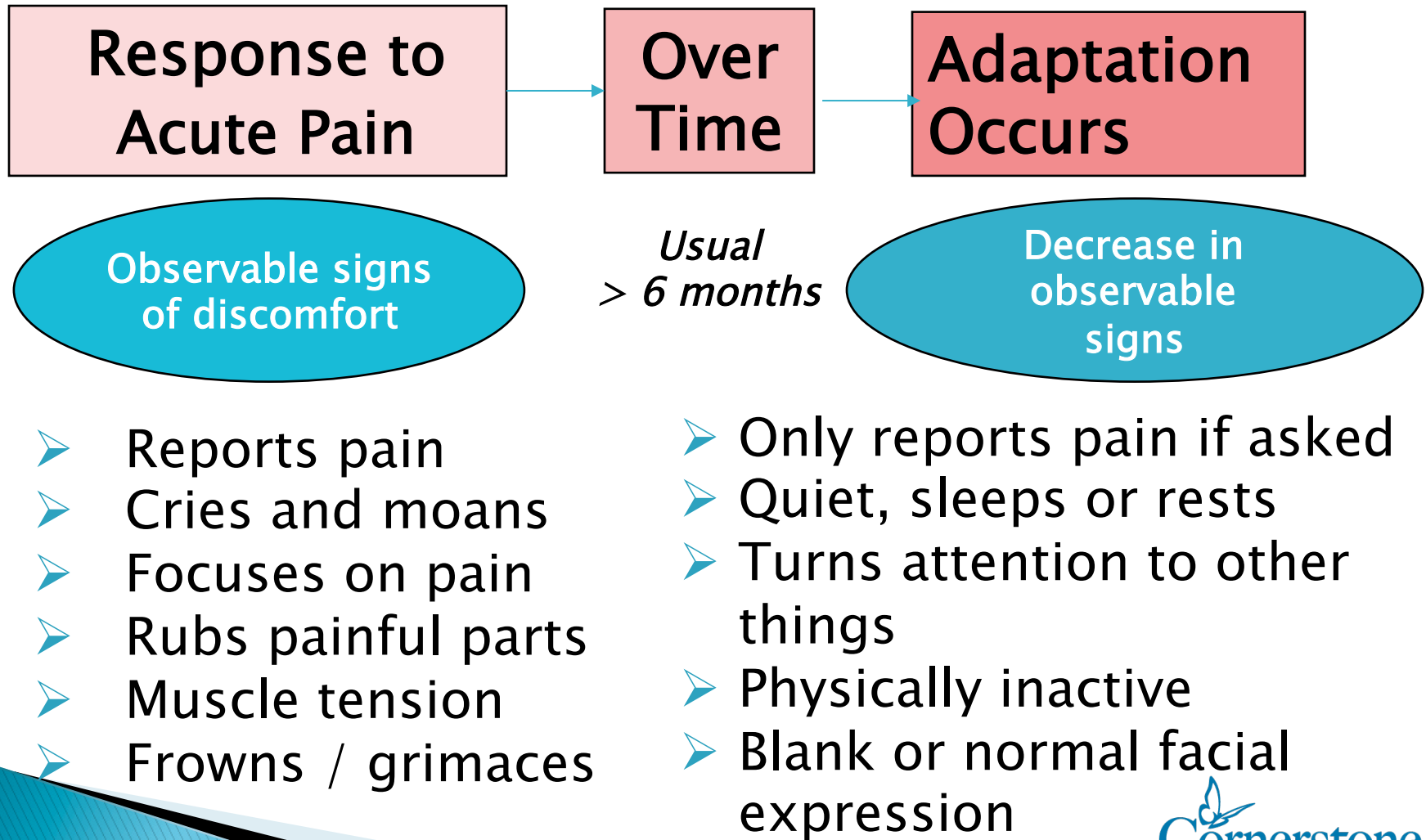
Chronic:

Characteristics	Sharp, localized, may radiate. Sudden onset	Dull, aching, long duration
Signs and Symptoms	Increased BP, HR, pallor, anxiety	No physiological response, flat affect
Therapeutic Goals	Pain relief, possible sedation	Palliate pain, no sedation
Medication Administration	Standard doses, PRN, oral, or parenteral	ATC, oral preferred, individualize to pt

Physiologic Responses



Behavioral Responses



Pain Assessment

- Remember, it is not uncommon for patients with chronic pain to have acute painful episodes superimposed over chronic pain
 - Exacerbation of chronic pain
 - Development of a new painful stimulus

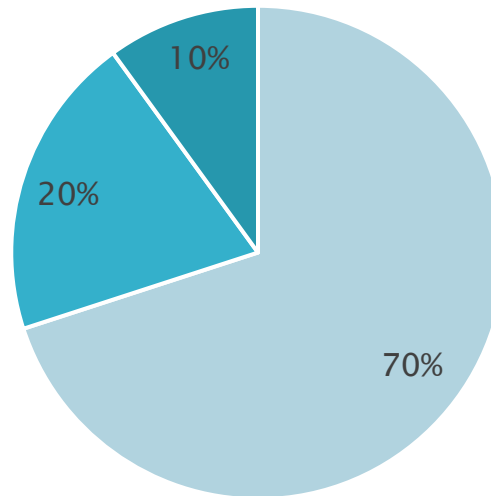
Recognition of this is important for proper assessment and treatment!

Cancer Pain–A Closer Look

- Pain
 - Single or multifocal origin
 - Caused by cancer
 - Secondary to antineoplastic treatment
 - Indirectly related or unrelated to cancer

Causes of Pain in Cancer Patients

Pain



■ Malignant Processes ■ Anti-neoplastic Therapy ■ Unrelated Incidental

Malignant Process – 70%

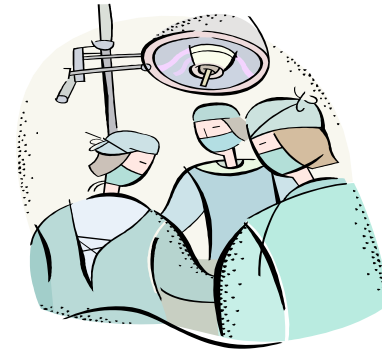
- Bone metastases
- Compression or infiltration of nerve tissue
- Obstruction of blood vessels and lymphatic system
- Increased intracranial pressure secondary to brain metastasis
- Soft tissue infiltration

Anti-Neoplastic Therapy – 20%

- **Chemotherapy-related pain**
 - Neuropathy
 - Mucositis, enteritis, and other infections
- **Radiation-related pain**
 - Radiation necrosis
 - Osteoradionecrosis
 - Mucositis and enteritis

Post-op pain

Acute, post op pain
Post op neuropathies



Procedure-related

Biopsy
Device placement

Indirect/Unrelated Causes – 10%

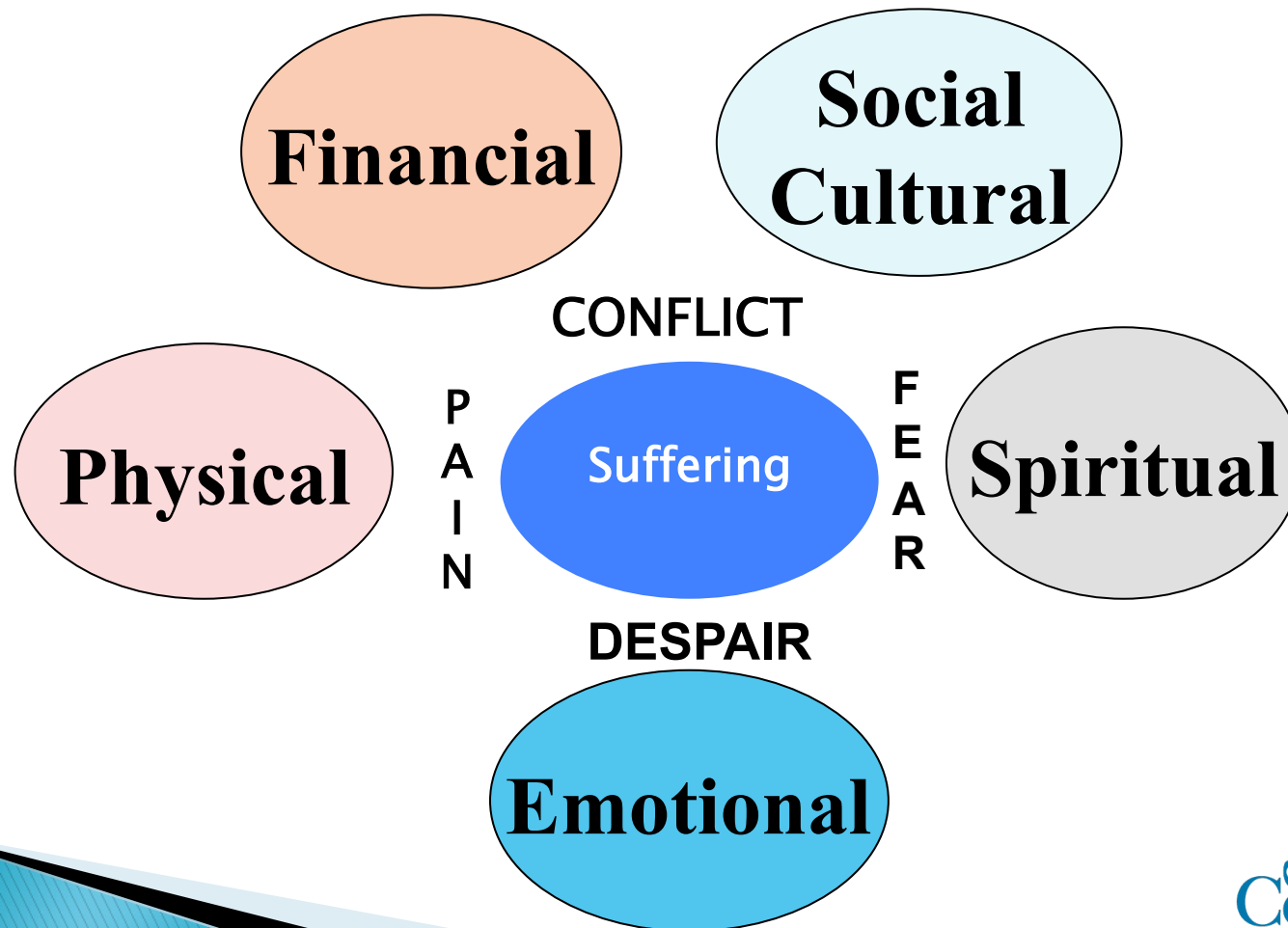
➤ Indirect Causes

- Herpes zoster/post-herpetic pain
- Oral/esophageal mucositis
- Paraneoplastic syndromes
 - Neuropathy
 - Myelopathy
- Hypertrophic pulmonary osteoarthropathy
- Abdominal pain

Unrelated Causes

- Arthritis
- Diabetic neuropathy
- Migraine headache
- Chest pain secondary to heart or lung disease
- Post traumatic injury

Effects of Pain – A Review



Key to Effective Pain Management

**Unless one pays attention
to the psychological, social,
and spiritual effects
of uncontrolled pain,
it may be impossible
to control a patient's pain**



Questions?

www.cornerstonehospice.org
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References

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Thank You!

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