Difficult Pain Syndrome/Intractable/Refractory Pain

Intractable pain syndrome is defined as persistent pain despite all the reasonable efforts to treat.

Reasonable efforts

Differs for specialties/Regions/Countries based on knowledge, attitudes, behavior, and resources

For some countries: Definition of intractable pain may involve exhausting the available opioids.

Factors predicting poor pain treatment outcome

Bruera et al in 1989 showed clinical staging system for cancer pain

In a prospective study, enrolled 56 patients for 3 weeks and staged them into 3 stages:

Stage 1: 22/54 had good pain control

Stage 2: 8/54 had intermediate prognosis

Stage 3: 22/54 had poor prognosis

Factors predicting poor pain treatment outcome

- **Mechanism of Pain**: Neuropathic pain had poor outcome
- **Pain characteristic: Incident** or breakthrough pain had poor prognosis
- **Previous opioid exposure**: The higher the opioid exposure the worse the prognosis
- **Cognitive function**: Impaired cognitive function had bad prognosis
- **Psychological distress**: Major depression, anxiety, hostility , or somatization
- **Tolerance**: Development of tolerance had negative implications
- **Past history** : alcoholism or drug addiction has negative implications

Incidental pain

- Escalate opioid dosage and add methylphenidate 10 mg in the morning and 5 mg at noon if drowsiness or sedation becomes a problem.
- Consider radiation therapy or orthopedics consultation if indicated.
- Epidural catheter is useful for some combination pain syndromes with breakthrough component.

Depression or anxiety

Assess and treat the patient for depression and anxiety.

Consider psychology consultation for expressive supportive counselling, CBT, relaxation/deep breathing techniques

Chemical coping

Assess patient for alcoholism and other illicit drugs . Questionnaire like CAGE can be useful.

Counsel the patient about the difference between nociception and suffering in pain expression, and about the difference between analgesia and coping chemically.

Consider restricting treatment to long-acting opioids with limited extra doses. Opioids should be prescribed for these patients by one physician only.

Somatization of chronic pain

Discuss with the patient the difference between pain caused by noxious stimuli and the pain of chronic suffering.

Delirium

Delirium can sometimes be misinterpreted as pain expression as patients often groan and moan and sometimes scream in a state of delirium.

Rule out all the common causes of delirium, like sepsis , opioid toxicity , electrolyte imbalance, hypercalcemia etc.

Treat the infection, switch the opioid medication ,and use haloperidol at times to control agitated delirium.

Bisphosphonates along with hydration is useful in patients with hypercalcemia

Assessment

Poor or wrong assessment of pain syndrome is the major cause of intractable pain in many patients

Case 1

Cancer Pain Assessment

Significance of pain syndrome assessment:

A 56 year old with metastatic renal cell carcinoma , with metastasis to lungs , brain and spine , presents with upper abdominal pain , with back pain , not responding to opioids. Currently on PCA morphine 4mg/hr +4 Q 10 mins. prn. , +RN bolus 8mg Q 1 hr. prn. Previously on tramadol, oxycodone.

Cancer Pain Assessment

Diagnosis of nociceptive somatic abdominal pain is made. Ordered CT Scan , which showed retroperitoneal adenopathy , and suspicious liver lesions.

Patient scheduled for celiac plexus block-did not help.

Cancer Pain Assessment

Radiation oncologist was consulted to radiate retroperitoneal adenopathy,for back pain.Completed 10 fractions.No help, caused fatigue and nausea.

Cancer Pain Assessment

Primary service- nothing else to offer…

Cancer Pain Assessment

Pain history elaborated again. Patient has back pain with radiation round the chest into upper abdomen.

Neuro revealed hypoesthesia in T9-T12 dermatomes.

AXR –revealed FOS-Treated most of the abdominal pain ,but back pain persisted.

Cancer Pain Assessment

An MRI of T /L spine ordered , which revealed T9-T12 involvement with epidural disease.

Radiation/Neurosurgery consulted.

No surgery , but patient received radiation to T-spine

Cancer Pain Assessment

Patient was started on Neurontin, and later Nortriptyline was added with significant improvement in pain.

Medications switched to PO and d/ced to home hospice with good pain control

Cancer Pain Assessment
QI issues-

- Poor pain history – No neuro exam
- Anatomic location was not narrowed
- Inappropriate nerve block
- Wrong imaging studies
- Wrong consultation
- Radiation to wrong site
- Adjuvant medications were not used appropriately
- Patient could have been discharged to hospice with unresolved issues

Case 2

A 65 y/o man with h/o of met rectal cancer with mets to spine admitted with severe pain in the lumbar area secondary to mets. Pain was mostly incident related

Case 2

All routine measures have been tried, but no relief with side-effects

Then radiation was given without benefit

Epidural was placed-helped pain better , but incident pain was still a problem

Vertebroplasty provide complete pain relief

Case 3

A 72 y/o man with multiple myeloma admitted with dehydration, severe mid back pain. Patient moaning and groaning.

Case 3

Treated with hydromorphone, NSAID's –

No relief with escalating doses.

Patient moaning and groaning- Family members demanding more pain medications.

Case 3

Patient was finally administered MDAS (Memorial Delirium Assessment Scale)

He failed, diagnosis of delirium made

Labs revealed hypercalcemia.

Patient improved with hydration, bisphosphonate and lowering opioid doses.

Case 4

A 26 y.o male presents with AML in remission presents with generalized body pains, attributes it to chemotherapy and BMT, receiving Demerol q2hr PRN.

Treatment

Assessment, Assessment, Assessment

Detailed psychosocial history

Minimize medications

Ongoing counselling

Exclude chemical coping

Rehabilitation approach

Case 5

A 66 y.o male presents with locally advanced carcinoma of the pancreas with severe mid-abdominal pain and mid back pain.

Treatment

- Celiac plexus block or not
- Assessment
- Initiate pharmacotherapy and end of life issue dialogue
- XRT/Chemotherapy
- Celiac/Splanchnic plexus block

Case 6

A 69 y.o female presents with unresectable osteosarcoma right hip. Failed one previous surgery and multiple regimes of chemotherapy. Reports severe incident pain. Pharmacotherapy with combination therapy is resulting in side-effects despite multiple opioid rotations. Patient cachectic, anorexic, and is a functional paraplegic

Treatment options

- Supportive care , with limited movement in bed
- Intrathecal neurolysis
- Epidural catheterization
- Cordotomy (Neurosurgical procedure)

Case 7

A 35 y.o. female with metastatic cancer of the cervix presents with low back and lower extremity pain.

Treatment

Assessment-emphasis on psychosocial issues

Neurological exam

Imaging to exclude epidural disease

Combination treatment(Somatic/Neuropathic/Steroid/ NSAID,

Psychological support

Anesthetic interventions if appropriate

Treatment of somatic pain

NSAIDs

Mild opioids

Physical modalities

Psychotherapy

Stronger opioids

Interventions

Treatment of Neuropathic pain

Adjuvants: TCA, Gabapentin, Steroids, NSAID

Stronger opioids

Methadone

NMDA receptor antagonist-Ketamine/Dextromethorphan

Interventions: Regional Sympathetic blocks,

IV Lidocaine

Neuro-axial medications: opioids, clonidine, local anesthetic

Difficult pain syndromes

Plexopathy pain

Rectal pain

Pancreatic Cancer Pain

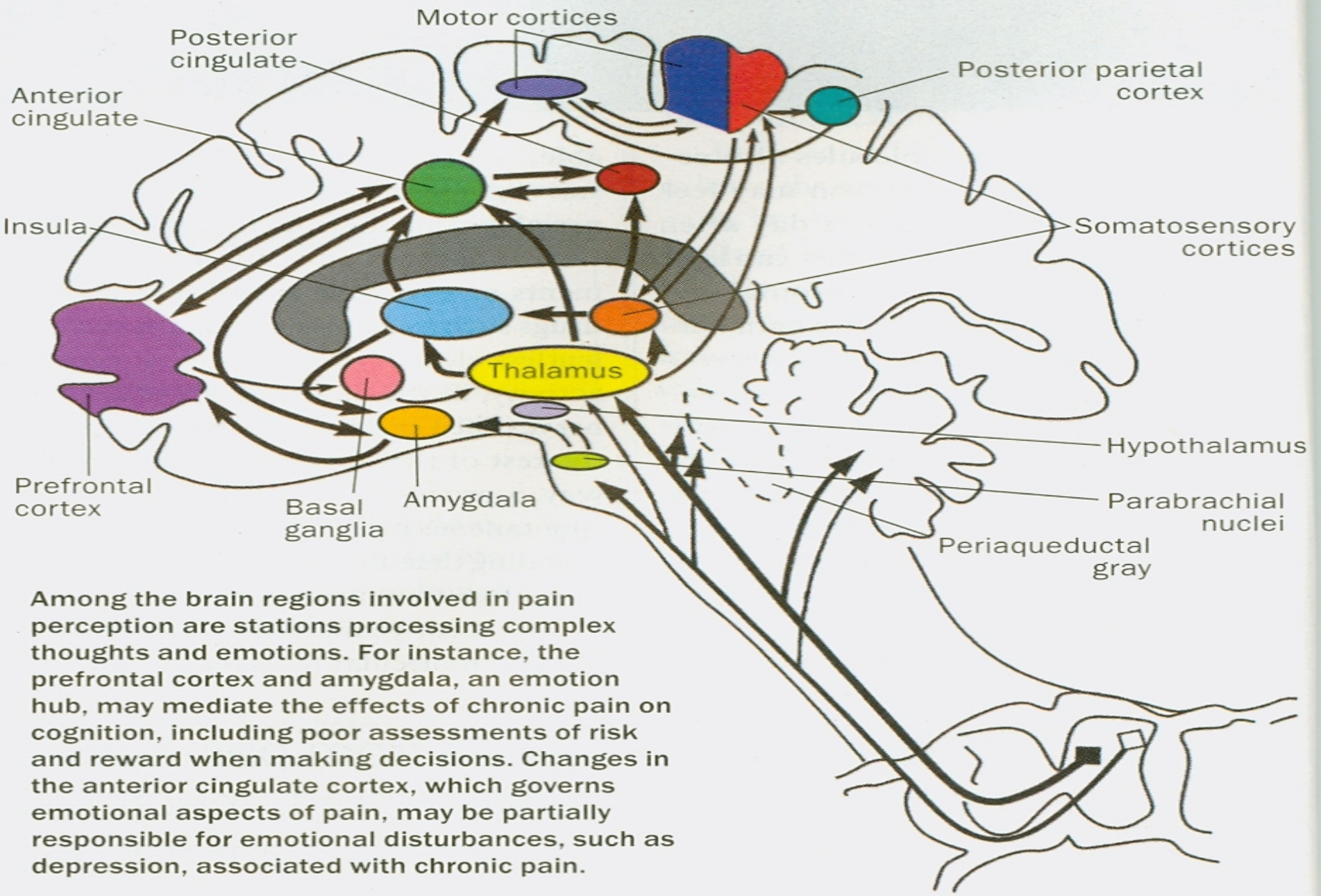
Breakthrough pain

H&N cancer pain

Difficult Pain Syndrome

Multi-disciplinary approach always helps

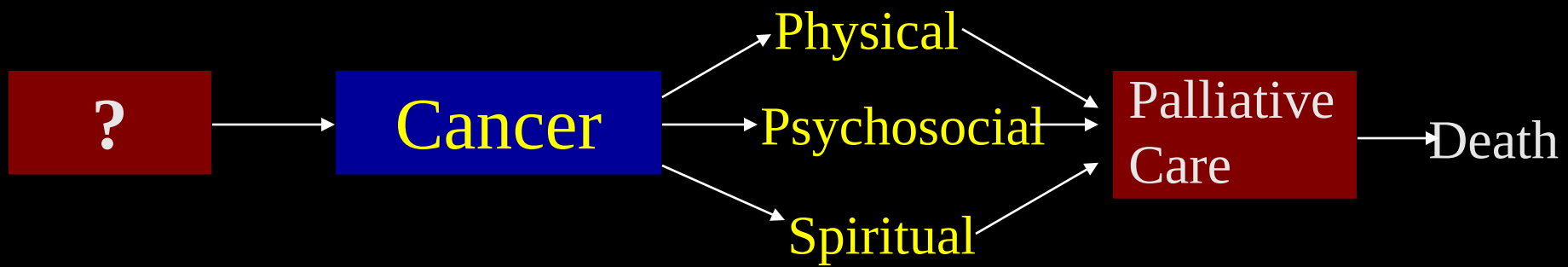
Pain in the **Brain**



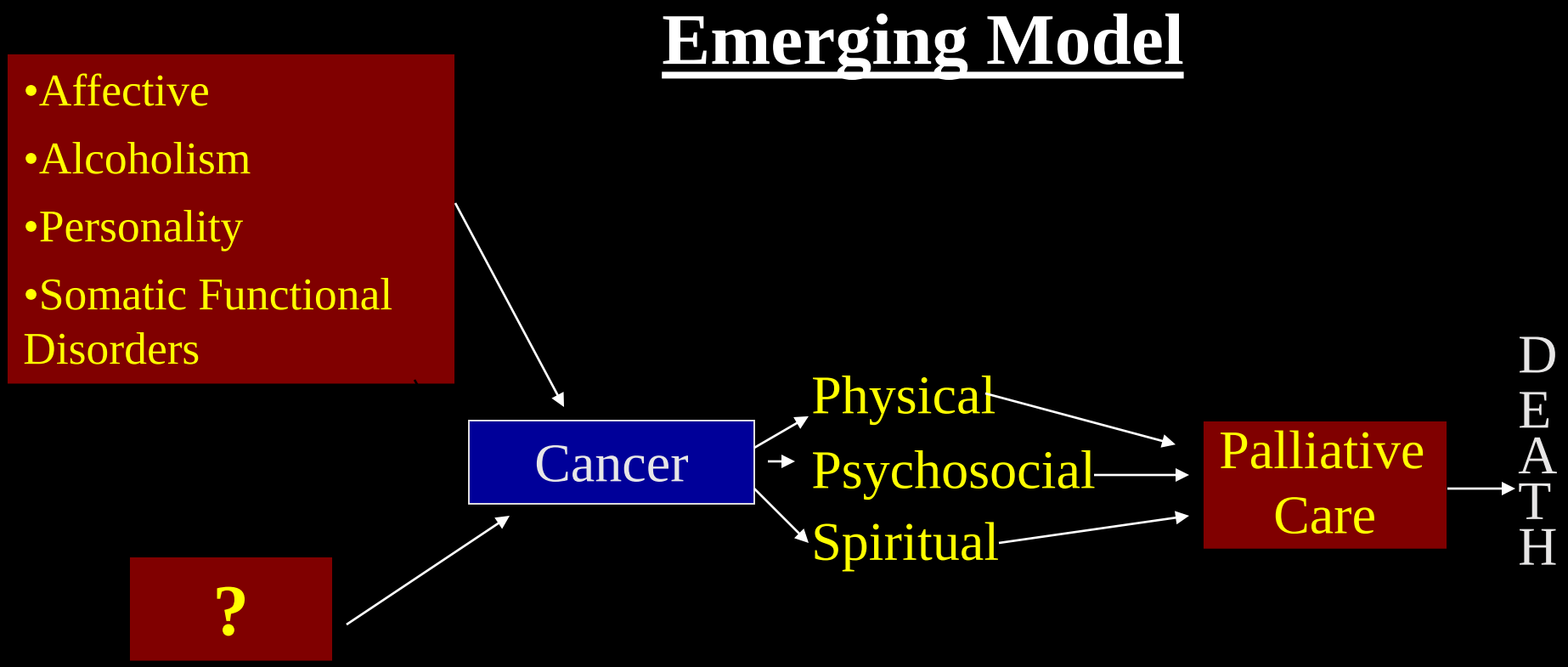
Among the brain regions involved in pain perception are stations processing complex thoughts and emotions. For instance, the prefrontal cortex and amygdala, an emotion hub, may mediate the effects of chronic pain on cognition, including poor assessments of risk and reward when making decisions. Changes in the anterior cingulate cortex, which governs emotional aspects of pain, may be partially responsible for emotional disturbances, such as depression, associated with chronic pain.

ASSESSMENT – Patient Characteristics

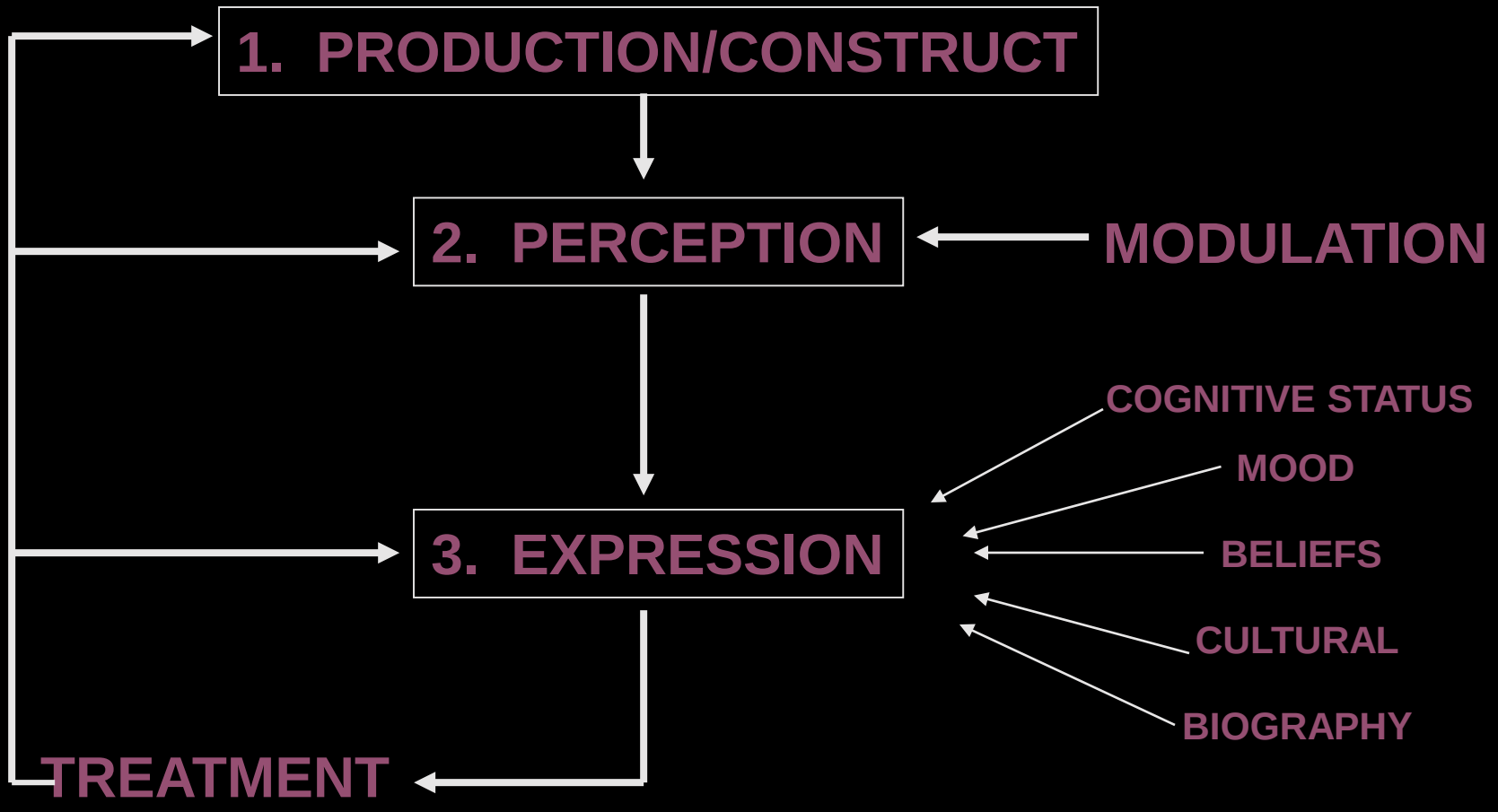
Traditional Model



ASSESSMENT – Patient Characteristics



Schema of Symptom Construct



Pain Syndrome (Emotional)

Psychosocial Syndrome :

Psychiatric(GAD, Depression, personality disorder-Axis II etc. , Social (Network, family, past bad experiences , home, Job,Debt etc.), Spiritual (Meaning of life, connectedness, after death meaning, God, Why Me? Etc)

Difficult to diagnose at first contact. May take 2-3 contacts after routine management fail to control symptoms.

WHAT IMPACTS PAIN INTENSITY 0-10?

1. **Afferent Nociception**
2. **Meaning (Cancer)**
3. **Personality (Stoic, Histrionic?)**
4. **Experience/Memory (Father died in pain)**
5. **Alcoholism/Drugs (Chemical coping)**
6. **Intelligence/Education (Understands pain & treatment)**
7. **Culture (Pain expression OK?)**
8. **Spirituality (Pain Good? Punishment?)**
9. **Secondary Gain (Attention from family)**
10. **Depression/Anxiety (Somatization)**
11. **Delirium (Disinhibition)**
12. **Trust In Doctors (Adherence, Placebo!)**

Pain Intensity 8/10

	Patient #1	Patient#2
Nociception	85%	30%
Somatization	5%	20%
Coping Chemically	5%	30%
Tolerance	5%	0%
Incidental Pain	0%	20%
	100%	100%