





Assessment and Management of Chronic Pain For MO





























- Understand bio psychosocial model of pain
- Understand approach towards Assessment and its importance
- Understand pain relief as an important aspect of quality of care
- Learn WHO analgesic ladder
- Learn drugs in the WHO analgesic ladder and their effective usage





















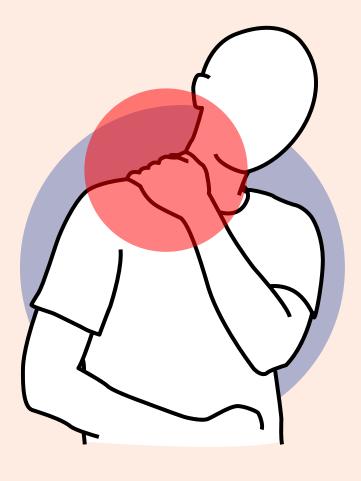
WHAT IS PAIN?

An unpleasant sensory and emotional experience associated with, or resembling that associated with, actual or potential tissue damage - IASP-2020

An unpleasant bodily sensation

An experienced threat associated with this sensation

A negative emotion based on this experienced threat









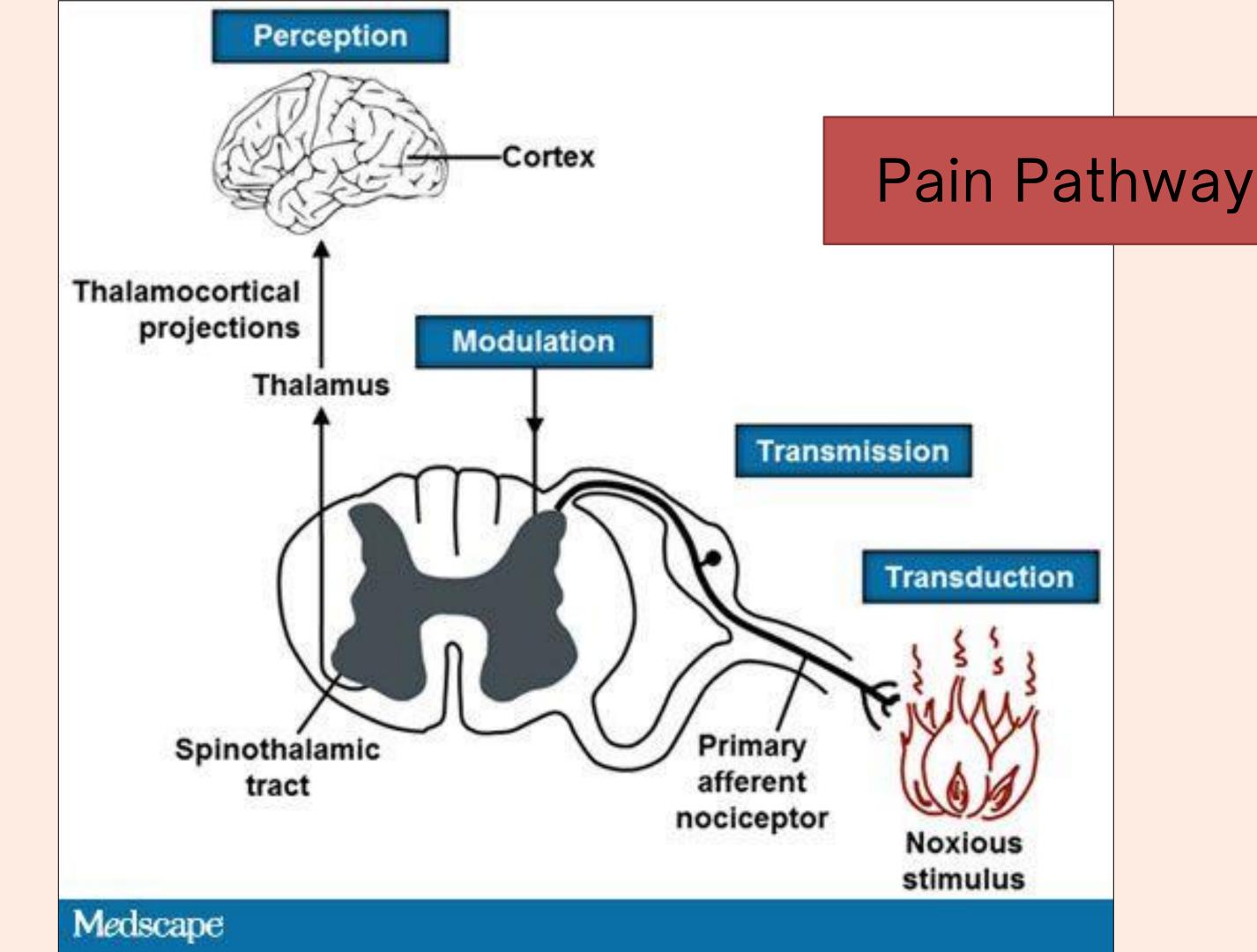




























• A 33-year-old female patient (Married, 2 year old son, husband was sole earning member in family and he left job from last 1 year because of her treatment)

Diagnosis: Carcinoma Right Breast (Post Surgery, Post Radiotherapy)

Presented to Pain clinic with severe pain all over the body

How will you approach this?











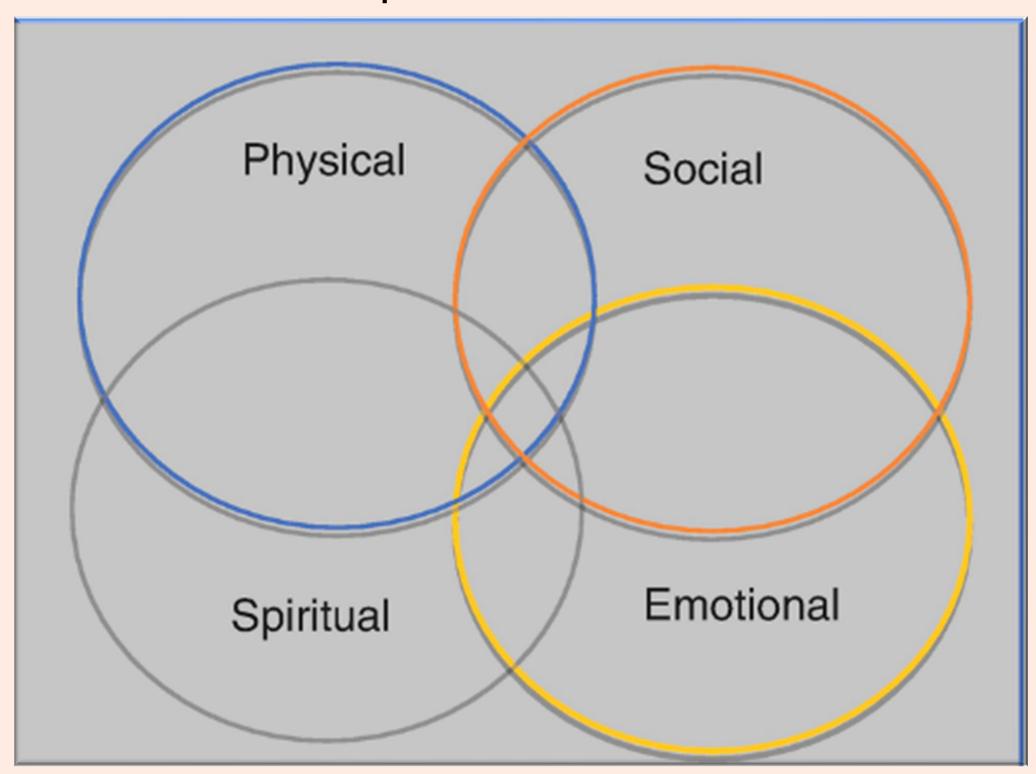






UNDERSTAND BIO-PSYCHOSOCIAL MODEL OF PAIN

Treat person as a whole



















TOTAL PAIN

Physical Pain

- Illness (Cancer)
- Cancer Treatment
- Unrelated to Cancer

Emotional Pain

- Anger at delays in diagnosis
- Anger at therapeutic failure
- Disfigurement
- Fear of pain / death
- Feelings of helplessness

Spiritual Pain

- What is the point of this all?
- Why has this happened to me?
- Is there any purpose in life?
- Is this a punishment?
- Why me?

Social Pain

- Worries about family, finances
- Loss of income
- Loss of social role
- Loss of role in the family
- Feeling of isolation











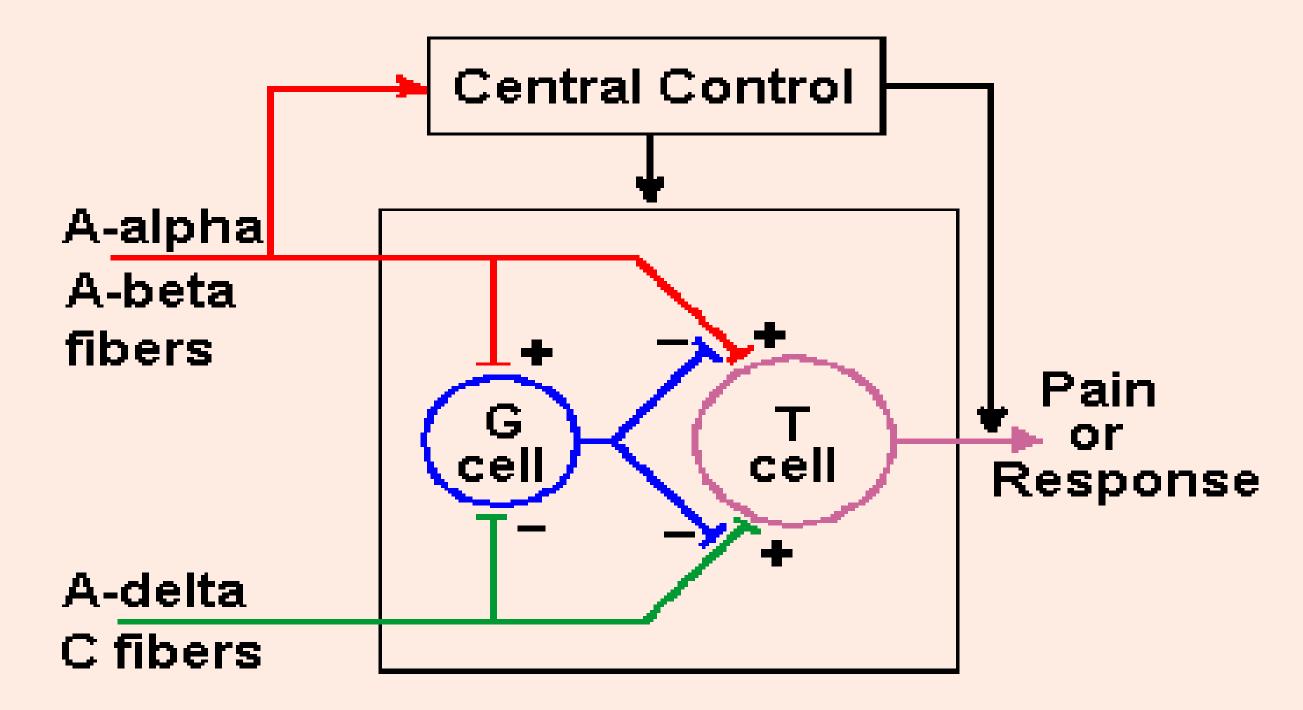






GATE CONTROL THEORY (MELZACK & WALL, 1965)

 Gate is present in substantia gelatinosa of dorsal horn of spinal cord which can be opened or closed







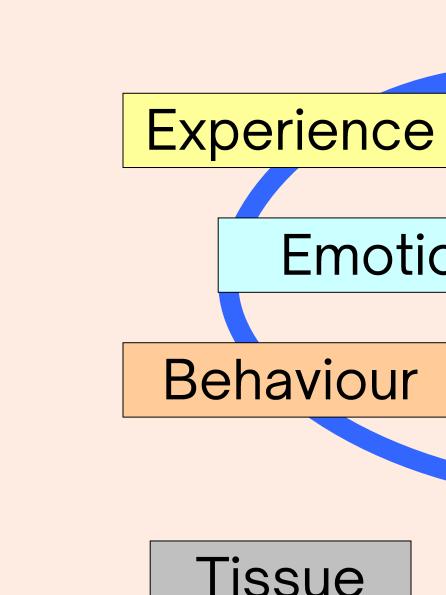


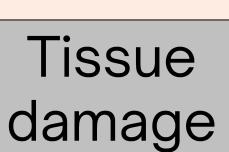




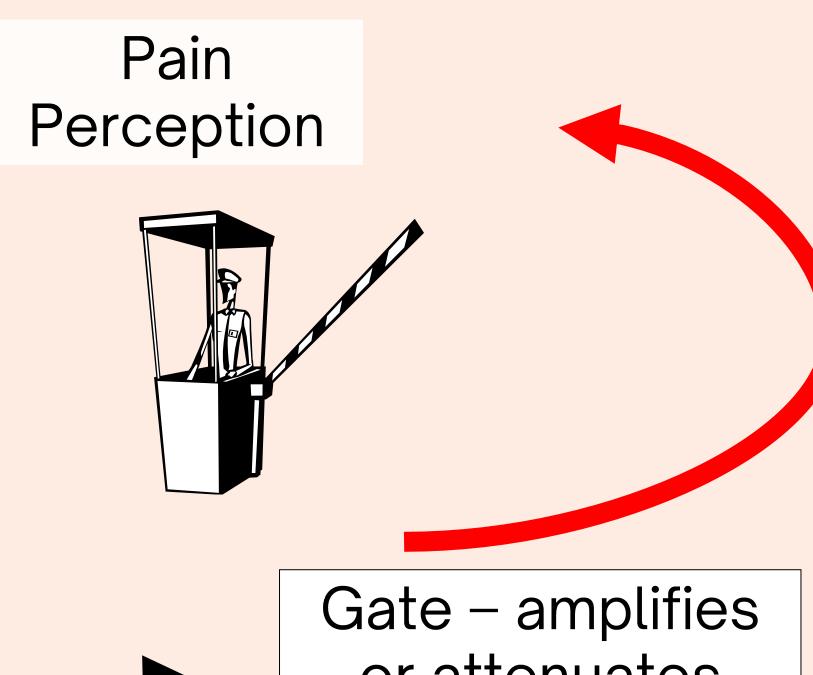








Emotion























OPENING AND CLOSING GATE

| Factor | Opens | Closes |
|-------------------------|---|---|
| Nerve fibres | C fibres | A-beta fibres |
| Physical | Injury | Medication |
| Emotional | Anxiety Stress Frustration Depression Tension | Relaxation Optimism Happiness |
| Behavioural (cognitive) | Boredom | Enjoyable activities Social interaction |

















MOST IMPORTANT

Knowing your patient



















EVALUATION

- History
- Records
- Investigate if required
- Confirm site
- Identify cause
- Establish trust











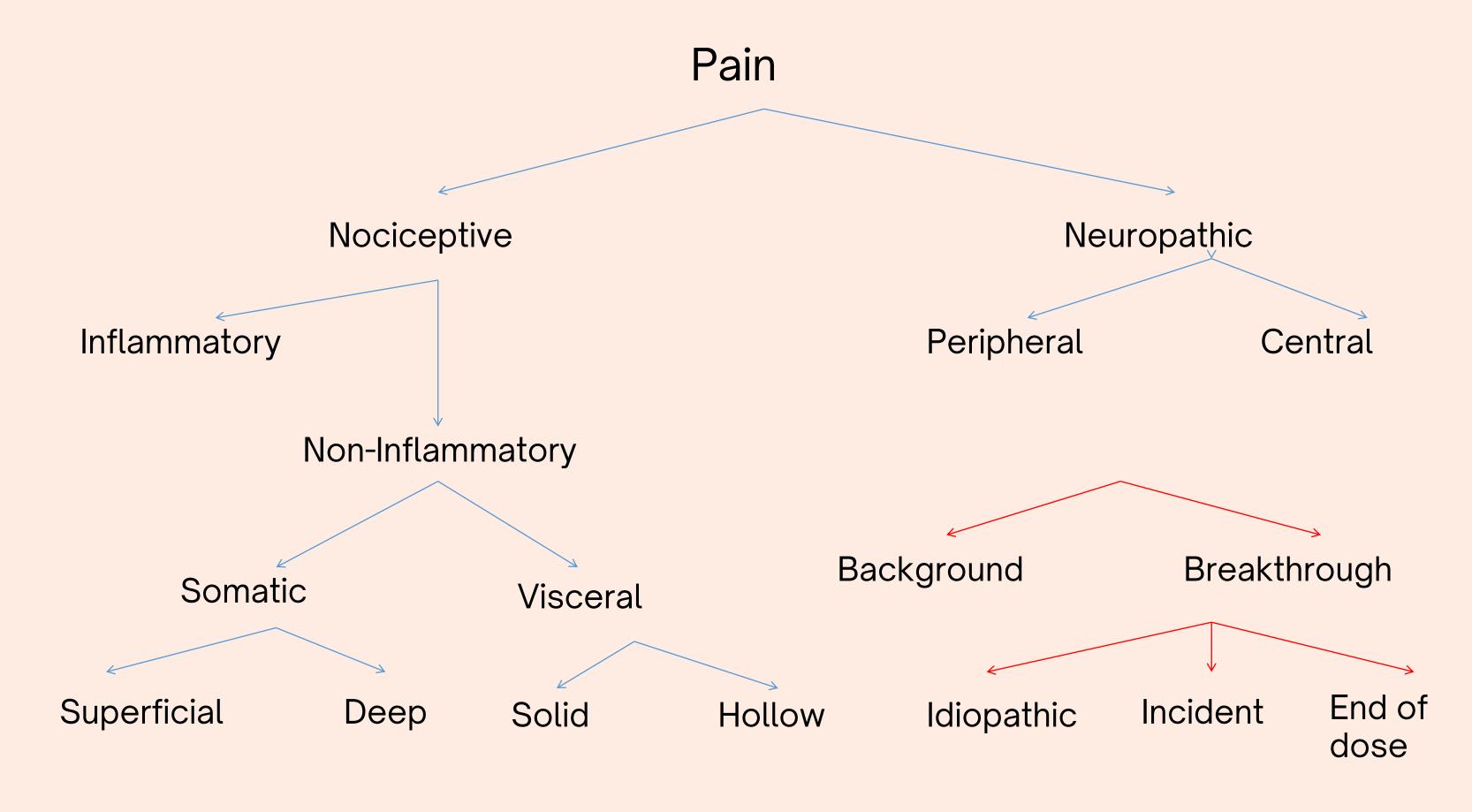








UNDERSTANDING THROUGH PHYSIOLOGY











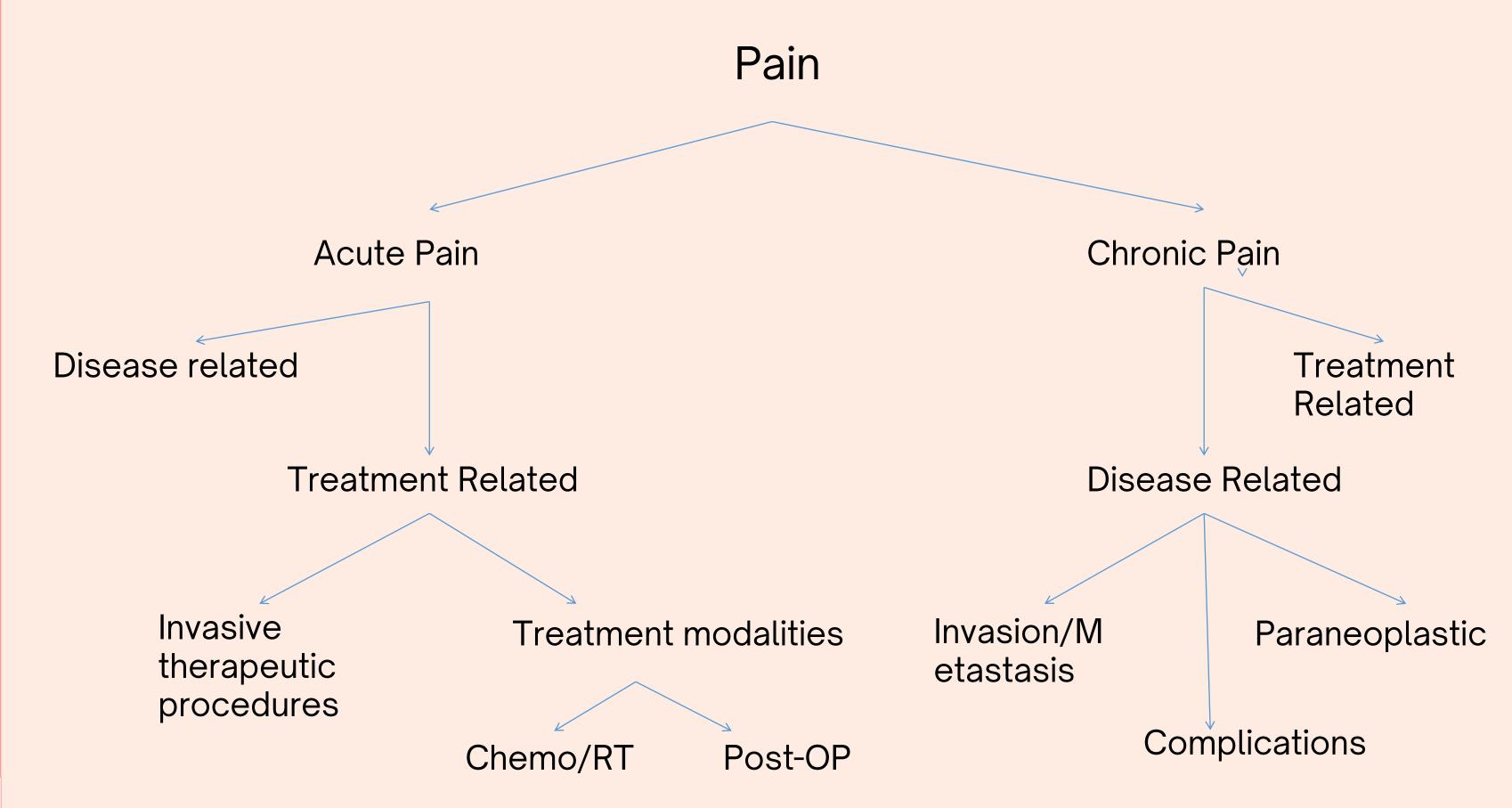








UNDERSTANDING THROUGH ETIOLOGY









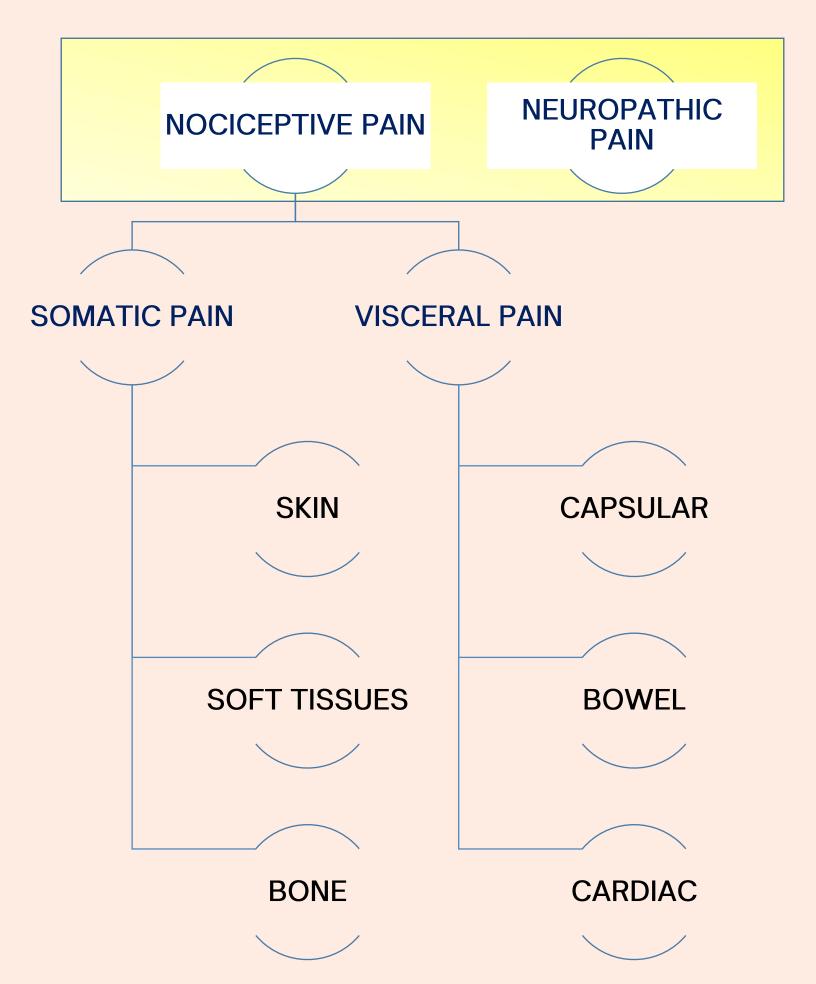












Quality of Pain

Aching
Superficial Somatic
Dull/sharp

Stabbing
Burning
Gripping

Capsular

Dull
Cramping - Bowel
Colic

Tight
Squeezing - Cardiac
Choking

Stinging
Electric like
Shooting
Burning
Numbness









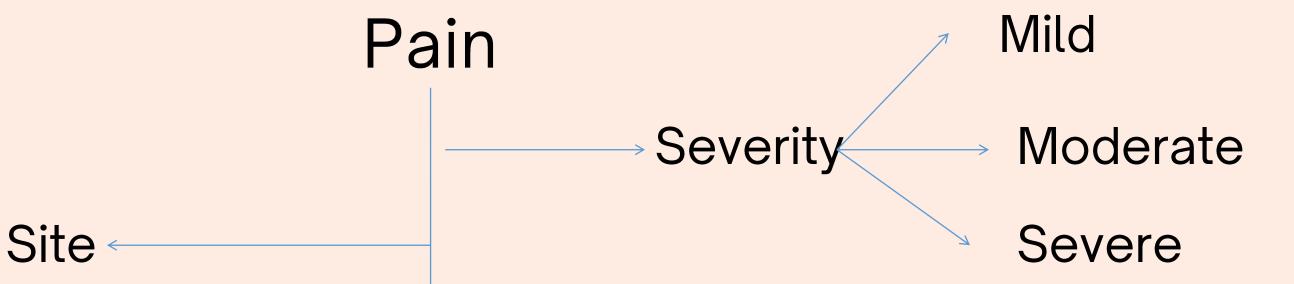








FURTHER EVALUATION REQUIRED

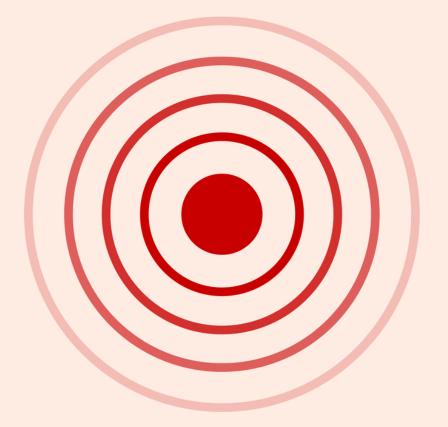


-----Character

Referred Radiating® Radicular

Impact

Aggravating
Precipitating
Relieving





PQRST PAIN ASSESSMENT METHODS

of Pain?











| P=Provocation /Palliation | When pain started? What caused it? What makes it better or worse? What triggers it? Stress? Position? Certain activities? What relieves it? Medications, massage, heat/cold, changing position, being active, resting? What aggravates it? Movement, bending, lying down, walking, standing? |
|------------------------------|--|
| Q=Quality/ Quantity | What does it feel like? sharp, dull, stabbing, burning, crushing, throbbing, nauseating, shooting, twisting or stretching. |

| R=Region/ | Location of Pain? Radiation |
|-----------|-----------------------------|
| Radiation | |

How severe is the pain? S=Severity



When/at what time did the pain start? How long did it last? How often does it occur? Is it sudden or gradual?



Remember to document all your observations











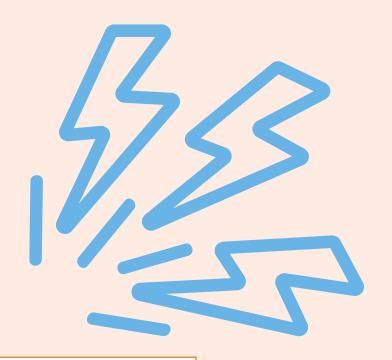






SUMMARY OF ASSESSMENT OF PAIN

- Elicit the distressing concerns for the patient and family
- Determine underlying pathophysiology, cause, and contributing factors
- Review current and past treatments, their effectiveness, and side effects
- Document assessment and plan
- Reassess at regular intervals



If we cannot assess pain, we will never be able to relieve pain - Betty R. Ferrell



















WHAT TOOLS/QUESTIONS YOU USE TO ASSES PAIN?

















ASSESSMENT TOOLS

- Unidimensional Scales
 - ➤ Visual Analogue Scale (VAS)
 - ➤ Numeric rating scale (NRS)
 - ➤ Verbal Rating Scale (VRS)
 - >Wong-Baker faces pain rating scale
- Multidimensional Tools
 - The McGill Pain Questionnaire (long and short form),
 - ➤ The Brief Pain Inventory (BPI)
 - ➤ The Pain Thermometer (PT)



















- Multidimensional Tools
 - >The Memorial Pain Assessment Card
 - ➤ The Wisconsin Brief Pain Questionnaire
 - >The Edmonton symptom Assessment system (ESAS)
 - >Multidimensional pain inventory-Screening Chinese version(MPI-SC)
 - ➤ Neuropathic Pain Scale
 - ➤ The Leeds Assessment of Neuropathic Symptoms and Signs (LANSS)



















Visual analog scale

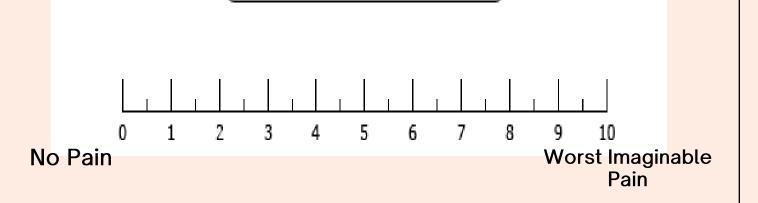
Place a mark on the line below to indicate how bad your pain feels.

No pain Worst pain imaginable

- Patient is asked to mark a 10 cm line at a point that corresponds to the degree of pain.
- The VAS score is the distance in millimeters from the left end of the line to the patient's mark.

Numeric rating scale

What does your pain feel like?



• Patient indicates the number that corresponds to pain severity, either verbally or by marking the scale.

VAS vs NRS

No Pain Mild Moderate Severe Very Severe Worst

Verbal Rating Scale



UNIDIMENSIONAL TOOLS















| Visual Analogue Scale | Numerical Rating Scale | Verbal Rating Scale |
|--|--|--|
| Validated for research | Less sensitive | Easy to Use |
| Simple to use | Requires patient to be able to translate pain severity to number. | Useful in mildly cognitively impaired |
| Sensitive to small changes | Not useful in visually impaired, cognitively impaired and children | Insensitive to small changes in pain intensity |
| Not useful in visually impaired, cognitively impaired and small children | | |
| | | |













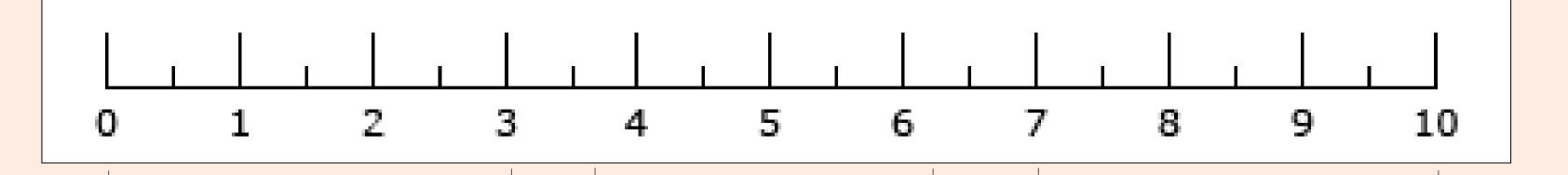




NUMERIC RATING SCALE



What does your pain feel like?



MILD

MODERATE

SEVERE







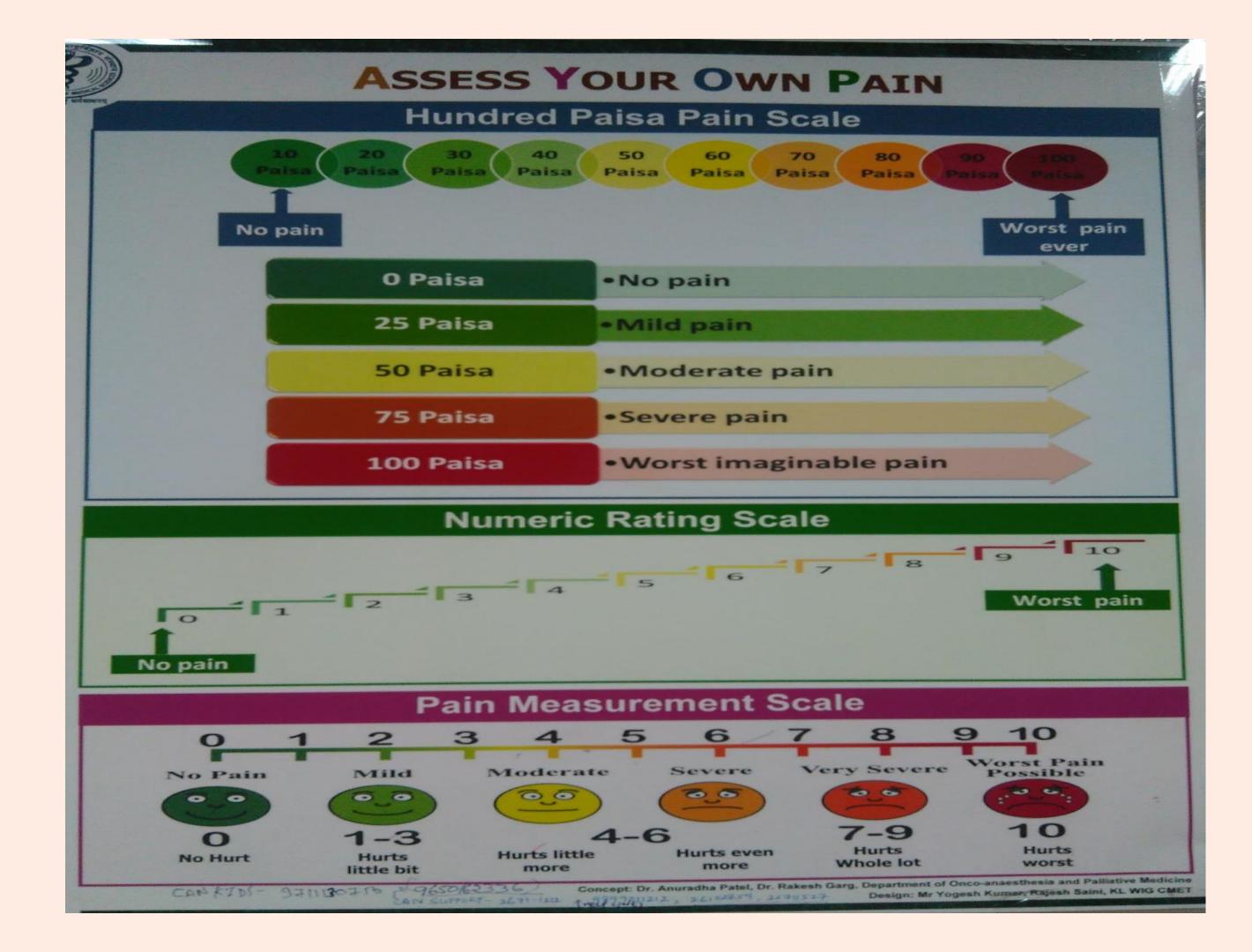






















Time

Consuming/Useful

in Research







Multidimensional Instruments

Provide Complex Information about Patient Pain

Use in Assessing Chronic Pain



WONG-BAKER FACES PAIN RATING SCALE



Some important Pain Rating Scales For Paediatric Population



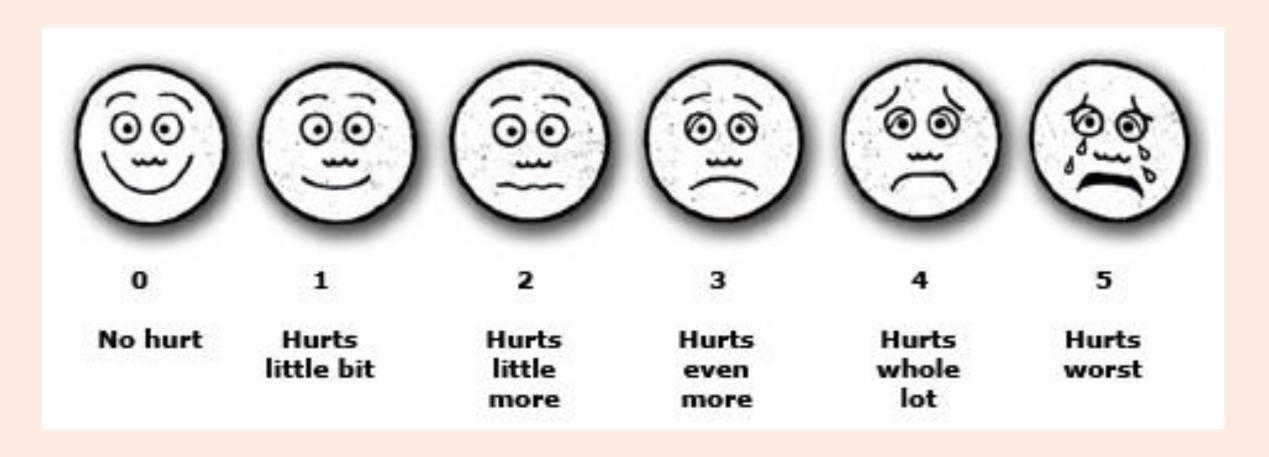












- For persons age three years and older.
- Point to each face using the words to describe the pain intensity.
- Ask the child to choose the face that best describes own pain and record the appropriate number.















REVISED FLACC PAIN SCORE

Can be used in preverbal children

| Cotogorios | Scoring | | | |
|---------------------------|--|--|--|--|
| Categories | 0 | 1 | 2 | |
| F Face | No particular expression or smile | Occasional grimace or frown, withdrawn, disinterested; appears sad or worried | Frequent to constant frown, clenched jaw, quivering chin; distressed-looking face: expression of fright or panic | |
| L Legs | Normal position or relaxed | Uneasy, restless, tense; occasional tremors | Kicking or legs drawn up; marked increase in spasticity, constant tremors or jerking | |
| A Activity | Lying quietly, normal position, moves easily | Squirming, shifting back and forth, tense; mildly agitated (eg, head back and forth, aggression); shallow and splinting respirations, intermittent sighs | Arched, rigid, or jerking; severe agitation, head banging; shivering (not rigors); breath-holding, gasping or sharp intake of breath; severe splinting | |
| C Cry | No cry (awake or asleep) | Moans or whimpers, occasional complaint; occasional verbal outburst or grunt | Crying steadily, screams or sobs, frequent complaints; repeated outbursts, constant grunting | |
| C Consolability | Content, relaxed | Reassured by occasional touching, hugging, or being talked to, distractable | Difficult to console or comfort; pushing away caregiver, resisting care or comfort measures | |

















PAIN FORMS

| THE OF WEST | |
|--------------|--|
| TOTE OF WEOK | |
| | |

2. Referred from other oncology department3. Directly presented to palliative department

Time of presentation to palliative care ward after diagnosis

Less than 8 weeks/ Less than 6 months/6 months to 1 year/ More than 1 year

PAIN AND PALLIATIVE ASSESSMENT FORM

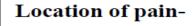
Department of Onco-Anaesthesia and Palliative Medicine NCI-AIIMS, New Delhi (Jhajjar Campus)

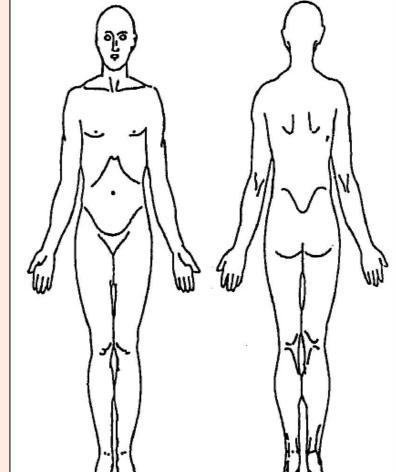


| Name: | Date: |
|--|-----------------------|
| 4 (C D) | |
| Age/Sex:Phone No.: | |
| NCI/UHID No: | Address: |
| | |
| | |
| Current Diagnosis: | |
| Current Diagnosis: | |
| | |
| S4 | |
| Stage of cancer: | |
| | |
| Secondaries | |
| | |
| When was cancer diagnosed? | |
| ······································ | |
| | |
| Treatment received: Surgery / Radiotherapy / | Chamatharany / Others |
| | Chemomerapy / Others |
| Details: | |
| | |
| | |
| Present status : On active therapy (CT/RT)/ | |
| Advanced malignancy stable/ | |
| Advanced malignancy progressive | |
| Referral to palliative care ward | |
| F | |
| Referred from DMG | |

Indication for referral

| Primary caregiver- | | |
|---|--|--|
| Description of Family Members- | | |
| Earning MemberSonsDaughters | | |
| Marriageable Daughters Dependent Children | | |
| Distance of travel to NCIkmsMode of Transport | | |
| Educational qualification: | | |
| Uneducated/ 5 th Std / 10 th Std / 12 th Std / Graduate / Postgraduate | | |
| Current socio-economic Status- (Income of family) | | |





| Investigation (Date) | Important Findings |
|-------------------------|--------------------|
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

















Loss of weight

Insomnia

PAIN FORMS

| PAIN ASSESSMENT | | | |
|---|----------------------------|-----------------------------------|------------------|
| MAXIMUM PAIN exp | erienced- 0/10/20/30/4 | 40 / 50 / 60 / 70 / 80 / 90 / 10 | 0 |
| NRS representing LEA | ST PAIN- 0 / 10 / 20 / | / 30 / 40 / 50 / 60 / 70 / 80 / 9 | 00 / 100 |
| Pain Maximum At- | Through Out / Morning / Af | fternoon / Evening / Not Spe | cific |
| Does It Radiate From T | he Point Of Origin: Yes/N | 10 | |
| Worsened by Activity: | Yes / No | | |
| Position/Posture Gives | Relief: | | |
| Have You Received Tre | eatment For Your Pain: | | |
| Pain Relief After Medic | eation: 0 / 10 / 20 / 30 | 0 / 40 / 50 / 60 / 70 / 80 / 90 | / 100 |
| How Long Relief Last- | < 2 Hr / < 4 Hr / < | 6 Hr / 6 – 10 Hr /> 10 | Hr |
| | | | |
| Describe/Nature the Ty | pe of Your Pain | 1 | |
| Aching | Throbbing | Burning | Shooting |
| Dull | Immobilizing | Exhausting | Electric like |
| Boring | Stabbing | Numbness | Stinging |
| How Much Does Pain Interfere with Your Daily Activity-? Not at All / A little / Quite a Bit / A lot / Can't do anything PAIN DIAGNOSIS Somatic / Visceral / Neuropathic / Bony / Mixed WHO LADDER STEP: Step I / Step II / Step III | | | |
| OTHER SYMPTOMS: | | | |
| Headache | Diarrhoea | Vomiting | Fatigue |
| Nausea | Fever | Mucositis | Dizziness |
| Constipation | Shortness of breath | Lymphoedema | Urinary problems |
| Lack of appetite | Cough | Anxiety | Bleeding |
| | | | |

Depression

Seizures

| COMPREHENSIVE | CARE P | LAN |
|---------------|--------|-----|
|---------------|--------|-----|

ECOG/Performance status.....

1. Management of symptoms

| Symptoms | Severity (NRS) | Medications |
|----------|----------------|-------------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

2. Record of Interventions if any

| Date | Intervention | Drugs used | Intensity of symptom before intervention | Intensity of symptom after intervention |
|------|--------------|------------|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

3. Reference to other collaborative departments (with reasons)

| Departments | Reason |
|------------------------|--------|
| Dietary referral | |
| Physiotherapy referral | |
| Others | |
| | |

















FOLLOW-UP FORM

PAIN AND PALLIATIVE FOLLOWUP FORM

| Name- | Date |
|--------------|-----------|
| Age/Sex | Phone no. |
| NCI/IRCH no. | Address. |

| | Follow up No. Date- | | Follow up No. Date- | | Follow up No. Date- | | Follow up No. Date- | |
|-----------------------|------------------------|--|------------------------|---|------------------------|--|------------------------|---|
| Symptoms | Severity | Medications | Severity | Medications | Severity | Medications | Severity | Medications |
| Pain : (Site/Type) | | Opioid (dose with quantity) Tramadol Morphine Fentanyl Patch Other | | Opioid (dose with quantity) Tramadol. Morphine Fentanyl Patch. Other | | Opioid (dose with quantity) Tramadol. Morphine. Fentanyl Patch. Other. | | Opioid (dose with quantity) Tramadol. Morphine Fentanyl Patch. Other |
| | | Other Analgesics: T. PCM | | Other Analgesics: T. PCM. T. Flexon. T. Gabapentin. T. Pregabalin. Others | | OtherAnalgesics: T. PCM | | Other Analgesics: T. PCM T. Flexon T. Gabapentin T. Pregabalin Others |
| GI prophylaxis | | T.Pan 40. T.Rantac | | T.Pan 40. T.Rantac | | T.Pan 40. T.Rantac | | T.Pan 40. T.Rantac |
| Constipation: | | Syp Cremaffin T. Dulcolax | | Syp Cremaffin T. Dulcolax | | Syp Cremaffin T. Dulcolax | | Syp Cremaffin T. Dulcolax |
| Nausea/Vomiting | | T. Emset. T. Perinorm. Others. | | T. Emset. T. Perinorm. Others. | | T. Emset. T. Perinorm. Others | | T. Emset T. Perinorm Others |
| Dyspnoea: | | | | | | | | |
| Others/Plan: | | | | | | | | |
| Next review Date | 1 | | | | | | | |
| Name of Doctor | | | | | | | | |

















How will you proceed for pain management?





















AIMS OF PAIN MANAGEMENT

Optimize pain control

Minimize side effects

Enhance functional abilities

• Improve quality of life











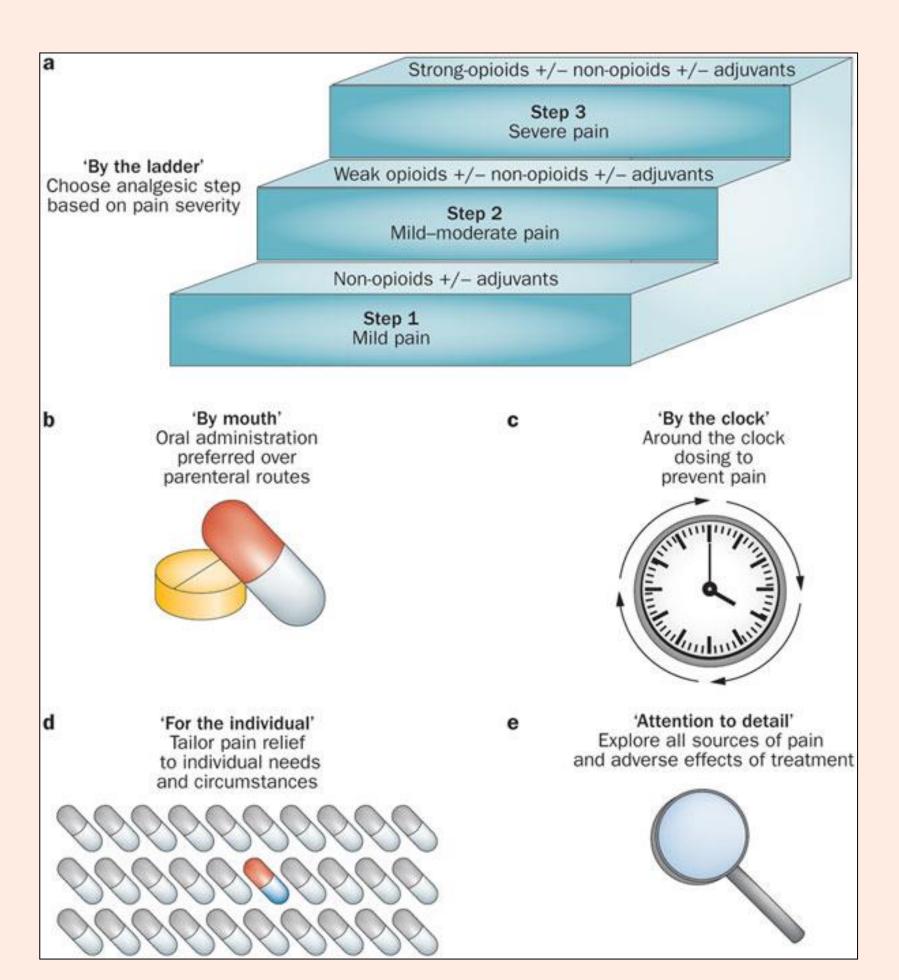








WHO LADDER OF PAIN MANAGEMENT



















| Non Opioid Analgesics | Paracetamol Non-steroidal Anti-inflammatory Drugs |
|--------------------------|---|
| Weak Opioids | CodeineTramadol |
| Strong Opioids | Morphine -1ST Line Diamorphine/Fentanyl/Hydromorphone-2nd Line Methadone-3rd Line |
| Adjuvant Drugs | Corticosteroids - Pain Caused By Oedema Antidepressants - Neuropatic Pain Anticonvulsant - Neuroapthic Pain Muscle Relaxants - Muscle Cramps Antispamotics - Bowel Colics Antibiotics - Infection Pain |

Analgesics should be given..

- By the mouth
- By the clock
- By the ladder

INDIVIDUALIZE TREATMENT

















SAFE USE OF ANALGESICS



















NSAIDS

- Mild to moderate pain associated with acute or chronic inflammation
 - >Rheumatoid arthritis, Osteoarthritis, Ankylosing spondylitis
 - >Acute postoperative pain, Trauma
- Adverse effects
 - ➤ Due to COX 1 inhibition- Dyspepsia, Gastroduodenal ulcer, Platelet inhibition, Renal dysfunction
 - >COX 2 inhibitors-risk of cardiovascular complications

















NSAIDS

- Diclofenac : 25 -75 mg 12hrly (max 200 mg) topical preparations available
- Ibuprofen: 200 -800 mg 8 -12 hrly (max 3200 mg) platelet inhibition
- Ketoprofen: 300-600 mg 6-8 hrly fast elimination
- Naproxen: 250- 500 mg 8 -12 hrly(max 1375 mg) better GI profile
- Piroxicam: 20 mg 12-24 hrly (max 40 mg) long half life
- Mefenamic Acid: 500 mg 8-12 hrly may cause diarrhoea, pancytopenia











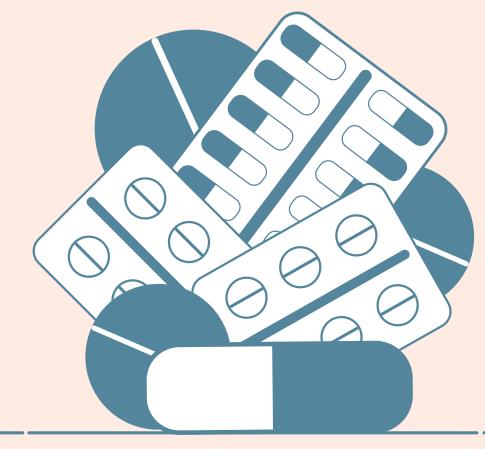






PARACETAMOL

- Mechanism of action: COX 3, Central serotonergic mechanism, central cannabinoid system modulation
- Analgesic, no anti inflammatory activity
- First line agent
- Metabolised in the liver
- Adverse effect: Dose dependent hepatotoxicity
- Dose: Oral 325 -1000mg 6 to 8 hrly (max not > 4 g/day)



















TRAMADOL FOR MODERATE TO SEVERE PAIN



Best to use in combination with other analgesics

Rapid IV injection of Tramadol can cause seizures





Dizziness, nausea, vomiting, headache, drowsiness, fatigue, sweating, dry mouth, constipation











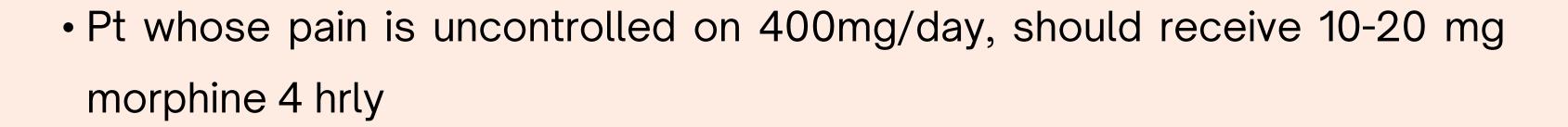






TRAMADOL

- Centrally acting opioid agonist on μ receptor
- Activates monoaminergic spinal inhibition of pain
- Useful alternative to codeine as step-2 opioid
- Dose: 50-100mg 4-6hrly





















CODEINE

- Acts on μ receptor
- Biotransformation to morphine contributes to analgesic action
- Usual doses:30-60 mg 4-6 hrly (200-400 mg daily)
- Duration of action: 4-6 hrs
- Usually combined with NSAIDS





ANTICONVULSANTS













| | Drug | Dose | Mechanism of action | Adverse Effects | Comments |
|---|--------------------|---|--|---|--|
| | Gabapentin | Start 100-300 mg HS Usual dose 300- 1200 mg TDS Max 4800mg/d | Membrane stabiliser by binding to Calcium channel | Dizziness, Somnolence, Fatigue, Peripheral edema. | |
| | Pregabalin | Start 75 mg HS Usual 225- 300 mg BD | same | same | Analgesic effect seen in 3 days. |
| | Carbamaze- pine | Start 100 mg/d Increase by 200 mg every 3d Max 2000 mg/d | Na Channel Blockade. | Sedation, dizziness, ataxia, diplopia, hepatitis, rash, hyponatremia, Aplastic Anaemia. | TN Monitor LFT CBC, Electrolytes. |
|) | Oxcarbazep- ine | Start 150 mg BD Max 2400 mg/d | Voltage gated Calcium channel modulation Na channel blockade | dizziness, somnolence, ataxia, diplopia, nausea, hyponatremia. | Monitor LFT CBC, Electrolytes. |

















CORTICOSTEROID

Corticosteroids are used primarily as potent antiinflammatory agents. The anti-inflammatory action is mediated via several interacting mechanisms.

Indication:

- Obstructive syndromes
- Brain metastases
- Spinal cord compression
- Pain relief Pain caused by a tumour in a confined organ or body cavity, e.g. raised intracranial pressure

















NI-SRC

Drug interactions:

- Antagonize oral hypoglycaemics, insulin, anti-hypertensives and diuretics
- Metabolism is accelerated by antiepileptics (Carbamazepine, Phenytoin)
- Concurrent prescription with warfarin increases the INR

Pharmacokinetics

Rapid absorption Metabolised in liver enzyme, mainly excreted in kidney

Cautions

Diabetes mellitus, psychotic illness.
peptic ulceration
Prolonged courses of corticosteroids
increase susceptibility to infections

Adverse Effect

Avascular bone necrosis, Cataract, Diabetes mellitus, Infection, Muscle wasting and weakness, Hypertension, Cushingoid features.

















THE WONDER DRUG - MORPHINE

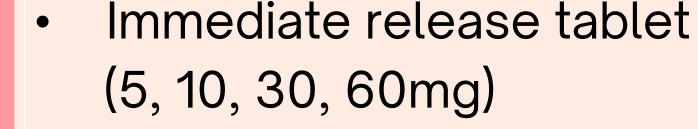
- Used for moderate to severe cancer pain.
- Initially intermediate-release preparation is used.
- Once daily requirement is determined sustained-released preparation.
- Then intermediate-release preparation breakthrough pain.





FORMULATIONS





Elixir



Onset: < 30 min















- Controlled release tablet (10, 30, 60mg)
- Controlled release suspension



Onset: ~1 hour

Peak: 3-6 hours

Duration: 12 hours



















- Mu (μ_1, μ_2)
 - > Supraspinal analgesia
 - > Euphoria
 - > Respiratory depression
 - > Physical dependence
- Kappa (κ₁- κ₄)
 - > Spinal analgesia
 - > Miosis
 - > Dysphoria
 - > Sedation



OPIOID RECEPTORS

















ATTENTION TO DETAIL

- Emphasize need for regular administration
- Consider:
 - > Previous opioid exposure
 - > Age of patient
 - > Extent of cancer (hepatic, renal involvement)
 - > Concurrent disease
 - > Concurrent medications

















HOW TO START







• If pain relief inadequate - increase dose gradually (5 mg increments)

• If patient very drowsy and pain relief adequate - reduce dose by 50%

Rescue doses when necessary









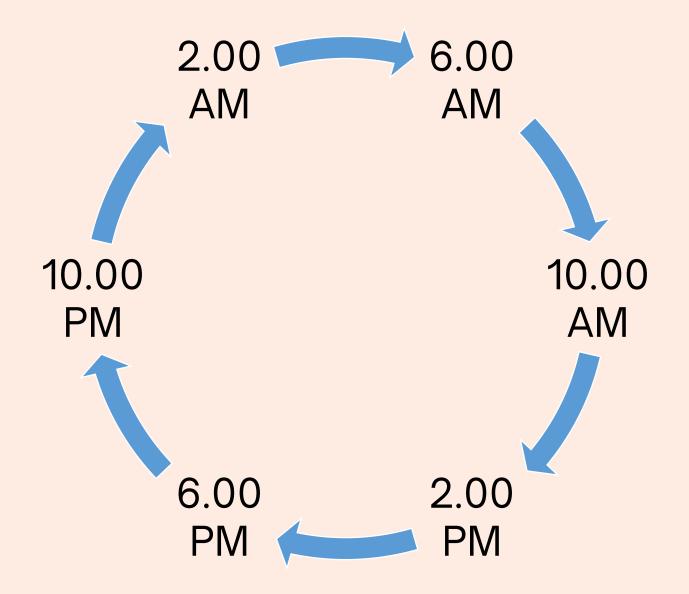








- Regular schedule
- Night doses: through the night or double dose at night
- Evaluate within a week



Rapid IV titration to determine dose for severe pain - can be converted to equianalgesic oral dose





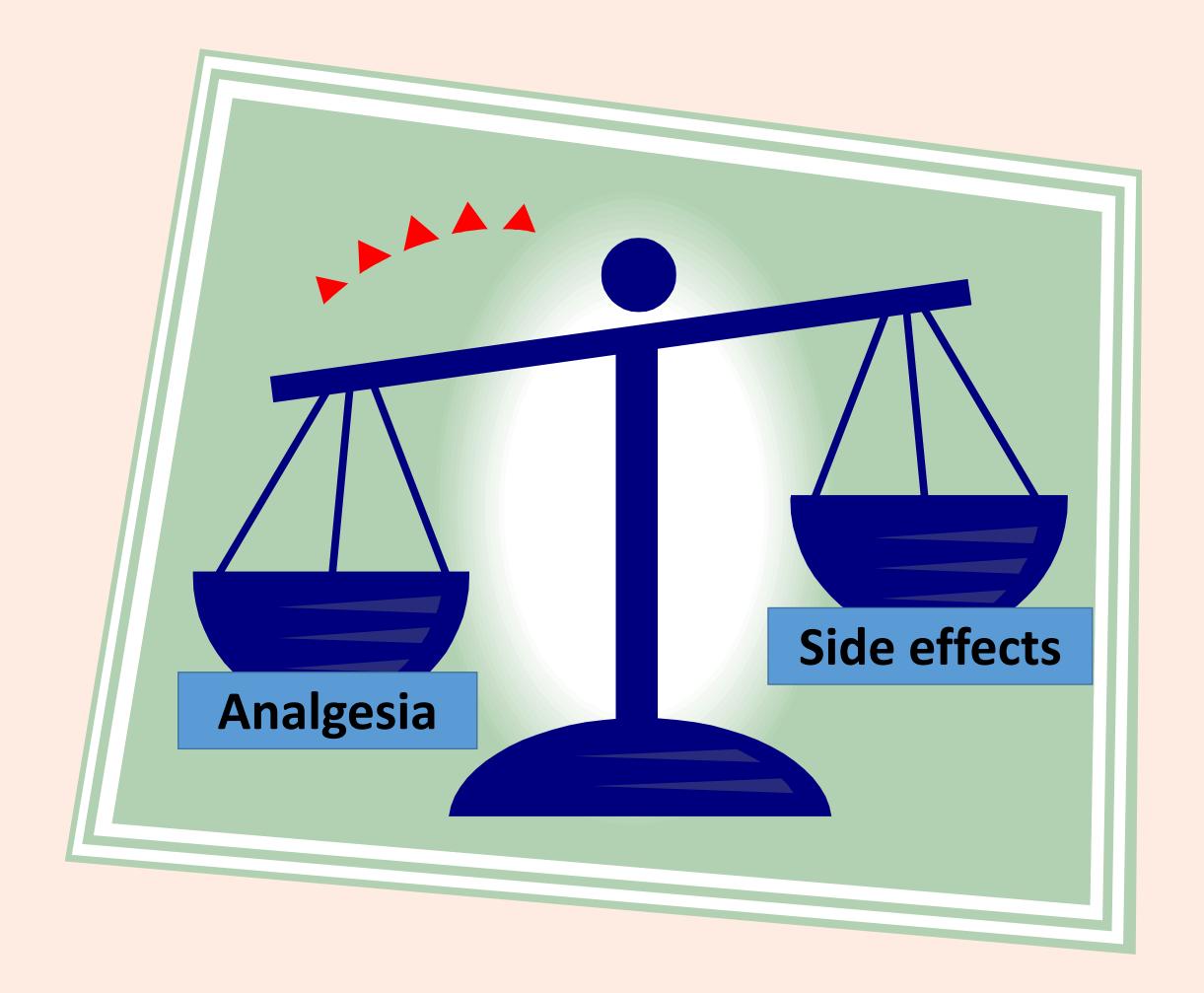






























Morphine

Pharmacology Mnemonics

M Miosis (pin point pupil) Orthostatic hypotension R Respiratory depression Р Physical dependency H Histamine release Increased ICP N Nausea • Euphoria

Sedation

















MORPHINE: PROBLEMS

- Morphine is scarcely available for majority of needy cancer patients
- Fears of Psychological addiction persists
- Minimal professional education of doctors and nurses in analgesics
- Too much importance is attached to expensive sophisticated methods of administration



















MYTHS AND REALITY OF MORPHINE

Patients' Perspective

- "If I take Morphine I wont be able to stop I will become addicted"
- "I have heard that Morphine has lots of side effects and I feel bad enough already"
- "If I take Morphine now, it wont work later on when my pain is worse and I really need it"
- "My doctor recommended Morphine, but that was what my uncle took just before he died"
- "Will morphine hasten death?"

















REALITY

Oral Morphine can be used safely as there is no ceiling dose effect

 Reassurance: All side effects will generally stop as your body adjusts and constipation can be easily treated

Morphine is NOT just for people who are dying

 There is no evidence that the correct use of opioids hastens death, in fact it improves QOL and can contribute to lengthening life



















ADDICTION

- Fears of patients becoming addicted are exaggerated, extremely rare in palliative care setting with titrated oral morphine therapy
- Reassure your patient that Psychological addiction is extremely rare
- Physiological dependence develops after long time usage



















"DO PATIENTS DIE OF MORPHINE INDUCED RESPIRATORY DEPRESSION?"

- It has a wide therapeutic range (making death unlikely)
- Clinically significant respiratory depression does not occur in cancer patients, when morphine dosage is titrated according to the patients pain, for the pain antagonizes morphine depressant effects

















PSEUDOADDICTION

- Latrogenic syndrome of behavioural changes because of inadequate pain relief
- Ensure pain management is adequate
- Monitor closely
- Adjust frequently to compensate for changes in patients needs
- "Flexibility is the key"



















FENTANYL

- Moderate to severe pain
- Synthetic opioid
- Potency: 100 times more potent than morphine
- Routes: iv, epidural, intrathecal, transdermal
- Doses: 25, 50, 75, 100 mcg/hr



















TRANSDERMAL PATCH

- Effect starts after 12-18 hrs of application
- Replace after 72 hrs
- Concentration decreases 12-18 hrs after patch removal
- Cannot be used if rapid analgesia is required
- Fentanyl accumulates to form a 'depot' in the skin below the patch, from where it gradually enters the circulation













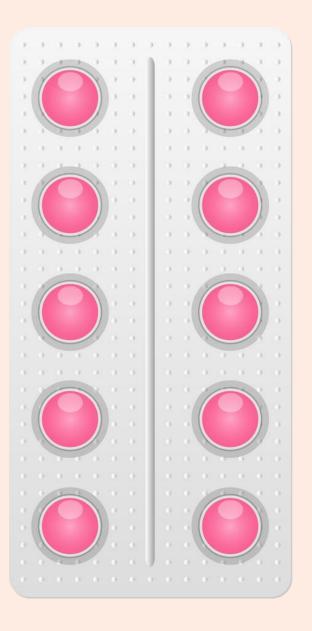








- Fentanyl 'lollipop'-Fentanyl impregnated raspberry coloured lozenge on a plastic handle
- Available in 200,300,400 μ g units, peak effects in 22 min
- Transmucosal fentanyl may provide a noninvasive rapid onset alternative for pt with poor oral or venous access







ORAL TRANSMUCOSAL FENTANYL CITRATE (OTFC)













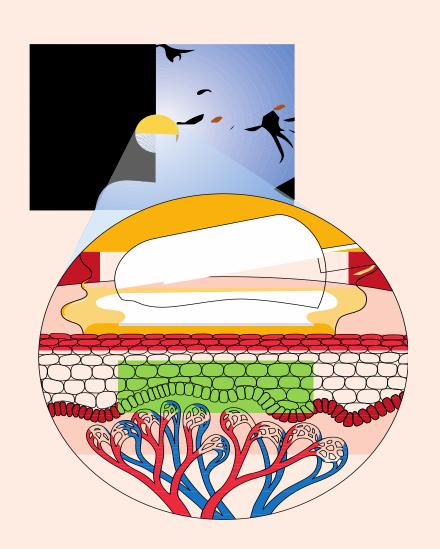


| Patch | OTFC | SC |
|-----------|--------|--------|
| 25 mcg/hr | 200mcg | 100mcg |
| 50mcg/hr | 400mcg | 200mcg |
| 75mcg/hr | 600mcg | 300mcg |
| 100mcg/hr | 800mcg | 400mcg |



OTFC Vs Oral Morphine

- Statistically superior to PO morphine tablets. However, the differences were small and their clinical relevance uncertain.
- Clinical meaningful pain relief (defined as a ≥33% reduction in pain was 42 vs. 32%
- Cost 80-100 Rs/Lozenge Oral Morphine 1-5 Rs/Tablet



















BUPRENORPHINE

- Moderate to severe pain
- longer duration of action
- Routes: iv, sublingual, transdermal patch
- Patch 5,10,20 mcg/hr -> 7 days, effect starts from 3rd day
- Adverse effects: blurred vision, cough, nausea, confusion, shortness of breath, dizziness



















OPIOID CONVERSION TO MORPHINE

| Drug | Potency ratio when compared to Morphine |
|--------------------|---|
| Codeine | 1/10 |
| <u>Tramadol</u> | <u>1/10</u> |
| Dextropropoxyphene | 1/10 |
| Tapentadol | 1/5-1/10 ? |
| Hydrocodone | 2/3 |
| Pethidine | 1/8 |
| Morphine | 1 |
| Hydromorphone | 5 |
| Methadone | 5-10 |
| Buprenorphine | 80-100 |
| <u>Fentanyl</u> | <u>100-150</u> |
| Oxycodone | 1.5 |









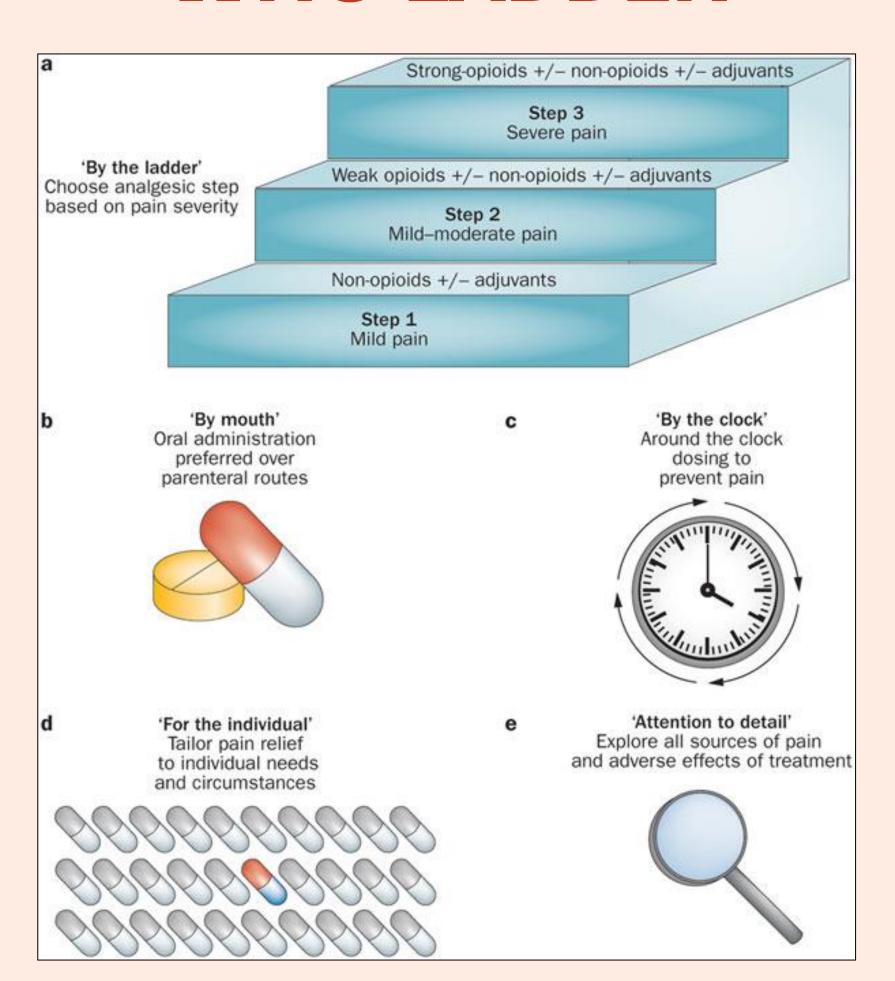








WHO LADDER





















"OPIOPHOBIA"



















Nurture-The existing resources
This is cheapest opioid option for us









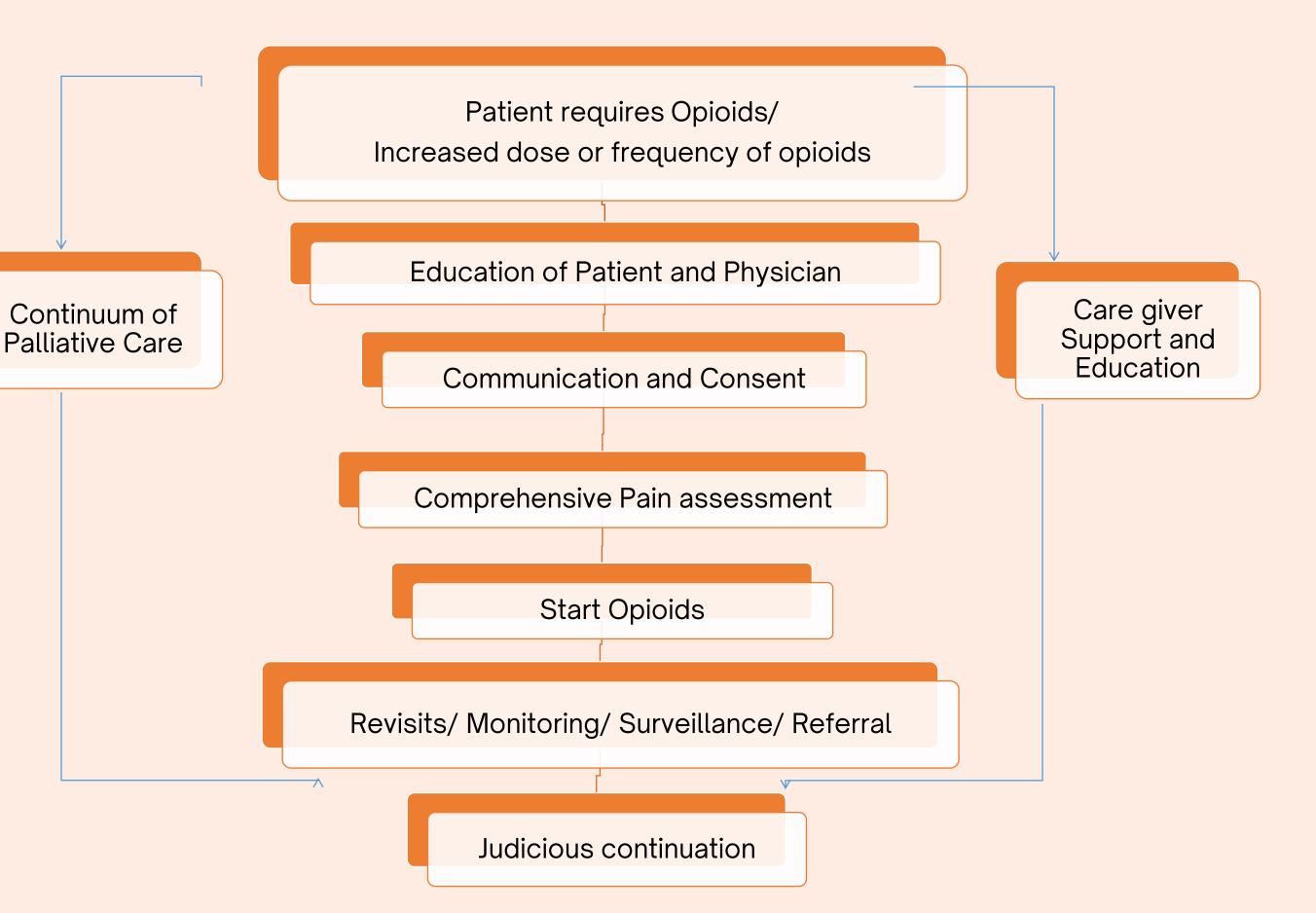








OPIOID SAFETY PROTOCOL



















MORPHINE SAFETY CIRCLE



















HOW WE DECIDE INTERVENTION?

Decisive criteria

 Failure to achieve adequate pain with pharmacological means

OR

 In cases of localized, severe pain, the risk and benefit ratio swing in favor of an intervention

















TAKE CARE OF TOTAL PAIN COMMUNICATION



Total Cancer Pain

Pain is one of the most common and distressing symptoms described by cancer patients. However, it is not purely a physical experience but involves various other components of human functioning, including personality, mood, behavior, and social relations. In an attempt to describe the all-encompassing nature of pain within a "whole-person" framework, Dame Cicely Saunders coined the concept of "total pain" [4]. She suggested that pain has psychological, social, emotional, and spiritual components that make up the "total pain" experience. Yet the contribution of each component will be specific to each individual and his or her situation. This concept has been well accepted in the palliative care community, although some have preferred to broaden it to the concept of "total suffering," which includes multiple symptoms but also extends beyond the physical to threats to the "intactness" of the person and an impending sense of disintegration of a familiar world [2].

















We have to take urgent action Otherwise Suffering will Continue

























Thank You











