Merupakan tanda vital (vital sign) ke 5 setelah:

Tekanan Darah

Nadi

Respiratory Rate

Suhu


Pain
the 5th vital sign™
American Pain Society

Membedakan seorang dokter dengan dokter yang lainnya:

“sense of crisis”

Kemampuan dan kecepatan “mendengarkan” dan “membuat kesimpulan”

Effective pain management is now an integral part of modern surgical practice

Postoperative pain management

- minimizes patient suffering
- can reduce morbidity
- facilitates rapid recovery and early discharge from hospital
- can reduce hospital costs

GOOD PAIN…

Acute pain plays a useful "positive" physiological role

- Providing a warning of tissue damage
- Inducing immobilization to allow appropriate healing

BAD PAIN....

Short term
negative effects of acute pain

- ✓ **Emotional and physical suffering for the patient**
- ✓ **Sleep disturbance**
  - ✓ with negative impact on mood and mobilization
- ✓ **Cardiovascular side effects**
  - ✓ such as hypertension and tachycardia

BAD PAIN....

- ✓ Increased oxygen consumption
  - ✓ with negative impact in the case of coronary artery disease
- ✓ Impaired bowel movement
  - ✓untreated pain may also be an important cause of impaired bowel movement
- ✓ Negative effects on respiratory function
  - ✓ Leading to atelectasis, retention of secretions and pneumonia
- ✓ Delays mobilization and promotes thromboembolism
  - ✓ Postoperative pain is one of the major causes for delayed mobilization

Postoperative Pain

- Pain generates emotional, physiological and psicological responses that affect the final recovery

- Intensity of pain depends on the operated area:

Thorax Đ Thoracoabdominal
Abdomen Đ Hip & Knee Đ OBGYN
Lower Abdomen
Osteoarticular
Skin

The Incidence of Moderate to Severe Pain with Cardiac, Abdominal, and Orthopedic Inpatient Procedures has been Reported as High as 25%-50%, and Incidence of Moderate Pain after Ambulatory Procedures is 25% or Higher.

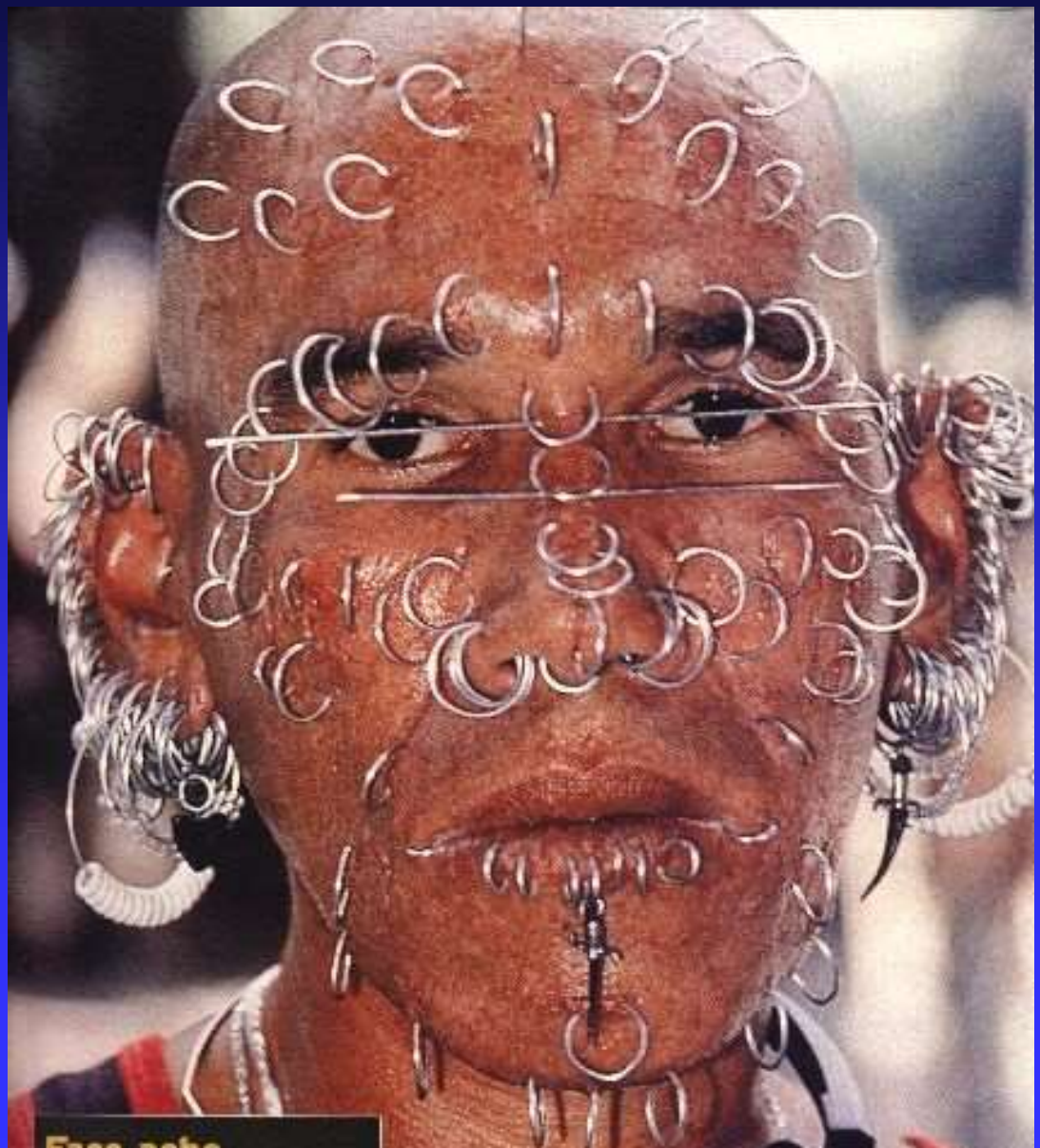
Goal

- Pain Management Interventions Should be Offered Around the Clock
- Pain Management is to Provide Continuous Pain Relief
- Patient Should be Assessed for Adequacy of Pain Control

Preoperative Evaluation of the Patient

- Type of Surgery
- Expected Severity of Postoperative Pain
- Underlying Medical Condition (Respiratory or Cardiac Disease)

Pain Assessment Tools



Pain Assessment Tools

- In Adults: Self Report Measurement Scales, such as Numerical Scales

Pain Assessment Tools

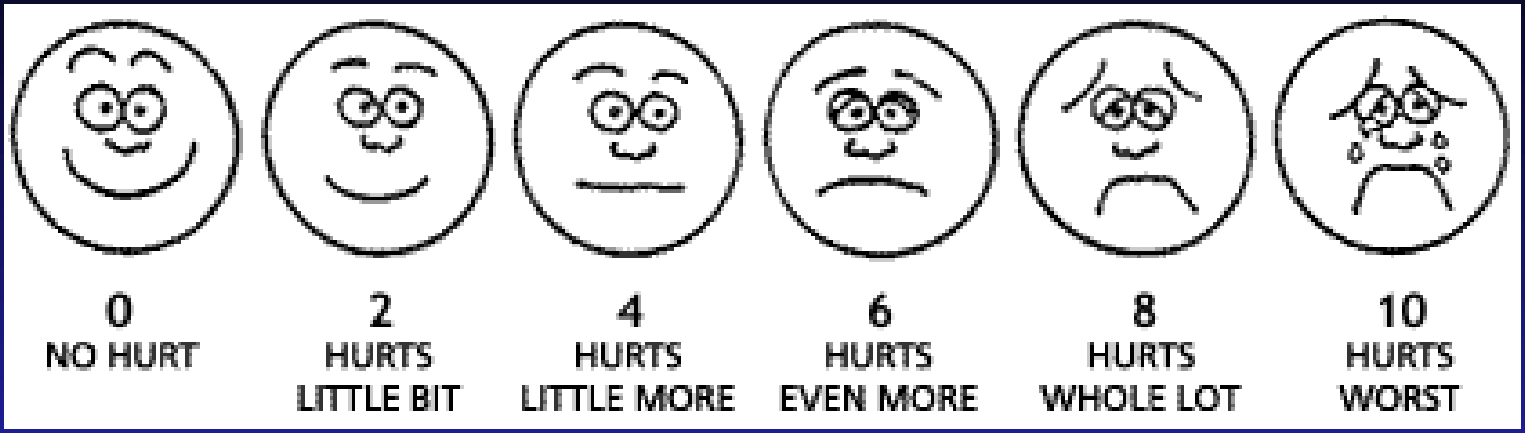
- In Pediatric Patients:
  - Physiologic and Behavioral Indicators of Pain (Infants, Toddlers, Nonverbal or Critically Ill Children)
  - Face Scale (Age 3-10 yrs)
  - Visual Analogue Scales (Age 10-18)

MODERATE

UNIVERSAL PAIN ASSESSMENT TOOL

This pain assessment tool is intended to help patient care providers assess pain according to individual patient needs. Explain and use 0-10 Scale for patient self-assessment. Use the faces or behavioral observations to interpret expressed pain when patient cannot communicate his/her pain intensity.

Verbal Descriptor Scale	NO PAIN	MILD PAIN	MODERATE PAIN	MODERATE PAIN	SEVERE PAIN	WORST PAIN POSSIBLE
WONG-BAKER FACIAL GRIMACE SCALE						
	Alert Smiling	No humor serious flat	Furrowed brow pursed lips breath holding	Wrinkled nose raised upper lips rapid breathing	Slow blink open mouth	Eyes closed moaning crying
ACTIVITY TOLERANCE SCALE	NO PAIN	CAN BE IGNORED	INTERFERES WITH TASKS	INTERFERES WITH CONCENTRATION	INTERFERES WITH BASIC NEEDS	BEDREST REQUIRED
SPANISH	NADA DE DOLOR	UNPOQUITO DE DOLOR	UN DOLOR LEVE	DOLOR FUERTE	DOLOR DEMASIADO FUERTE	UN DOLOR INSOPORTABLE
TAGALOG	Walang Sakit	Konting Sakit	Katamtamang Sakit	Matinding Sakit	Pinaka-Matinding Sakit	Pinaka-Malalang Sakit
CHINESE	不痛	輕微	中度	嚴重	非常嚴重	最嚴重
KOREAN	통증 없음	약한 통증	보통 통증	심한 통증	아주 심한 통증	최악의 통증
PERSIAN (FARSI)	بدون درد	درد ملایم	درد معتدل	درد شدید	درد بسیار شدید	بدترین درد ممکن
VIETNAMESE	Không Đau	Đau Nhẹ	Đau Vừa Phải	Đau Nặng	Đau Thật Nặng	Đau Đớn Tận Cùng
JAPANESE	痛みがない	少し痛い	いくらか痛い	かなり痛い	ひどく痛い	ものすごく痛い


0
NO HURT
2
HURTS
LITTLE BIT
4
HURTS
LITTLE MORE
6
HURTS
EVEN MORE
8
HURTS
WHOLE LOT
10
HURTS
WORST


10 Worst pain
9
8
7
6
5
4
3
2
1
0 No pain

Opioid Analgesics

- Bind to Opioid Receptors:
  Mu, Delta and Kappa
- Morphine, Hydromorphone, Meperidine, Fentanyl, Codeine, Methadone, Oxycodone, Hydrocodone, Tramodol
- Opioids may be Combined with NSAIDs to Enhance the Opioid Analgesic Effect

Opioid Analgesics

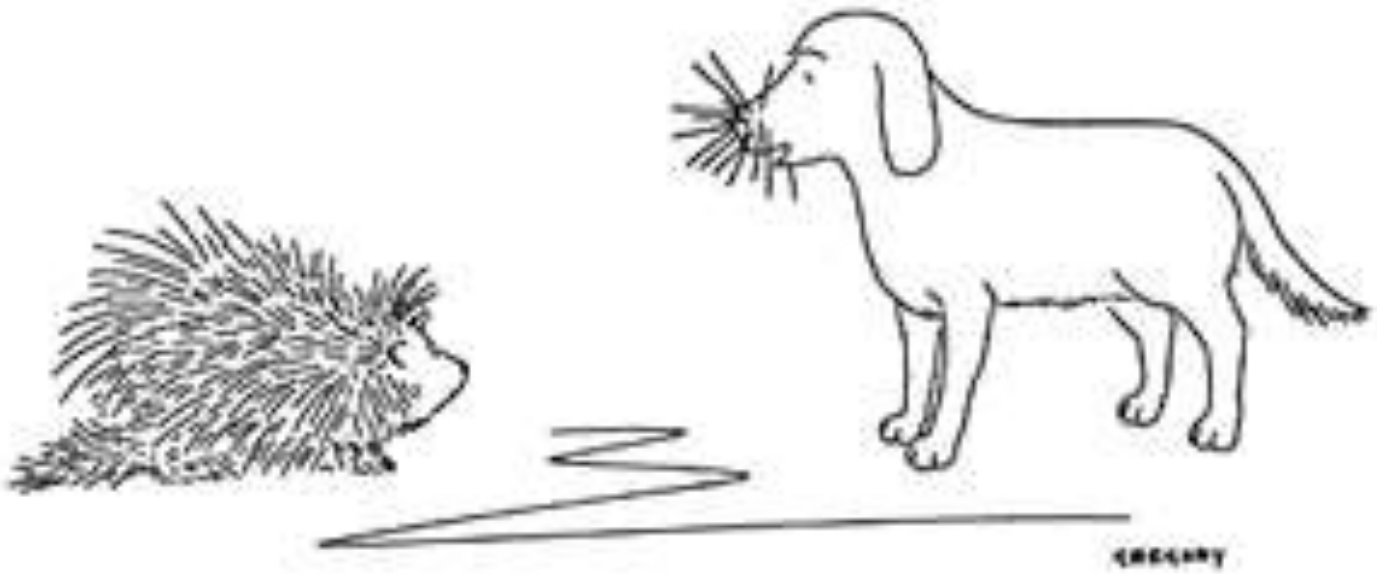
- Equianalgesic Conversion Charts are used when Converting form one Opioid to Another, or Converting from Parenteral to Oral Form
- Respiratory Monitors may be Used Depending on the Patients Age, Co-existing Medical Problems, or Route of Opioid Administered

Opioids

Drug	PO mg	IV mg	Starting Oral Dose mg	Comments
Morphine	30	10	15-30	MS Contin, Release 8-12 hrs MSIR for BTP
Hydro-morphone	7.5	1.5	4-8	Duration Slightly Shorter than Morphine
Meperidine	300	75		Duration Slightly Shorter than Morphine Normeperidine Causes CNS Toxicity
Methadone	20	10	5-10 Qd	Long Half-Life, 24-36 hrs Accumulates on Days 2-3
Fentanyl		0.02-0.05		Fentanyl Patch, 12 hrs Delay Onset and Offset

Commonly Used Opioid Analgesics

Medication	Route	Onset of Action	Duration of Action	Usual Dosing Interval
Fentanyl (Sublimaze®, Duragesic®, Actiq®,	IV	immediate	30 to 60 min	1 to 2 hr
	SC**	15 min	30 min to 2 hr	3 to 6 hr
MorphINE immediate release (MSIR®, Roxanol®, various)	PO	30 to 60 min	3 to 6 hr	3 to 6 hr
	IV	5 to 10 min	3 to 6 hr	3 to 6 hr
	SC	15 to 30 min	3 to 6 hr	3 to 6 hr
Meperidine (Demerol®)	PO	10 to 15 min	2 to 4 hr	3 to 4 hr
	IV	1 to 5 min	2 to 4 hr	3 to 4 hr



"On the plus side, you've cured my back pain."