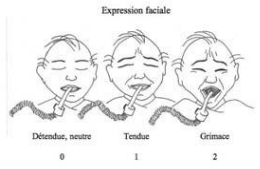
CPOT = Critical-Care Pain Observation Tool

AIM: The CPOT is a behavioural assessment pain scale for patients unable to verbalise pain.

The CPOT includes evaluation of four different behaviours (facial expressions, body movements, muscle tension, and compliance with the ventilator for mechanically ventilated patients or vocalisation for non-intubated patients) rated on a scale of zero to two with a total score ranging from 0 to 8. The CPOT is feasible, easy to complete, and simple to understand.

Indicator	Score		Description
Facial expression 	Relaxed, neutral	0	No muscle tension observed
	Tense	1	Presence of frowning, brow lowering, orbit tightening
	Grimacing	2	All above facial movements plus eyelid tightly closed, patient may bite ETT or clench teeth
Body movements	Absence of Movements	0	Does not move at all
	Protection	1	Slow, cautious movements, touching or rubbing pain site
	Restlessness / Agitation	2	pulling at lines, attempting to sit up, thrashing limbs, striking at staff, trying to climb out of bed
Compliance with the ventilator (intubated patients) **OR** - - - - - - - - - - - - - - - - - **Vocalisation (extubated patients)**	Tolerating ventilator or movement	0	Alarms not activated, easy ventilation
	Coughing but Tolerating	1	Coughing, alarms activated but stop spontaneously
	Fighting ventilator	2	Asynchrony, blocking ventilation, alarms frequently activated
	Talking in normal tone or no sound	0	Talking normal tone or no sound
	Sighing, moaning	1	Sighing, moaning
	Crying, sobbing	2	Crying out, sobbing
Muscle Tension Evaluation by passive flexion and extension of upper limbs when patient is at rest OR When patient is being turned	Relaxed	0	No resistance to passive movements
	Tense, rigid	1	Resistance to passive movements
	Very tense or rigid	2	Strong resistance to passive movements
TOTAL		**__/8**	**A PAIN SCORE 3-8 INDICATES PAIN**

CPOT ADDITIONAL GUIDANCE

Brief description of each CPOT behaviour:

Facial expression: The facial expression is one of the best behavioural indicators for pain assessment. A score of 0 is given when there is no muscle tension observable in the patient's face. A score of 1 consists of a tense face which is usually exhibited as frowning or brow lowering. A score of 2 refers to grimacing, which is a contraction of the full face including eyes tightly closed and contraction of the cheek muscles. On occasion, the patient may open his or her mouth, or if intubated, may bite the endotracheal tube.

Body movements: A score of 0 is given when a patient is not moving at all or remains in a normal position as per the nurse's clinical judgment. A score of 1 refers to protective movements, meaning that the patient performs slow and cautious movements, tries to reach or touch the pain site. A score of 2 is given when the patient is restless or agitated. In this case, the patient exhibits repetitive movements, tries to pull on tubes, tries to sit up in bed, or is not collaborative. Of note, body movements are the less specific behaviours in relation with pain, but are still important in the whole evaluation of the patient's pain.

Compliance with the ventilator: Compliance with the ventilator is used when the patient is mechanically ventilated. A score of 0 refers to easy ventilation. The patient is not coughing nor activating the alarms. A score of 1 means that the patient may be coughing or activating the alarms but this stops spontaneously without the nurse having to intervene. A score of 2 is given when the patient is fighting the ventilator. In this case, the patient may be coughing and activating the alarms, and an asynchrony may be observed. The nurse has to intervene by talking to the patient for reassurance or by administering medication to calm the patient down.

Vocalization: Vocalization is used in non-intubated patients able to vocalize. A score of 0 refers to the absence of sound or to the patient talking in a normal tone. A score of 1 is given when the patient is sighing or moaning, and a score of 2 when the patient is crying out (Ouch!) or sobbing.

Muscle tension: Muscle tension is also a very good indicator of pain, and is considered the second best one in the CPOT. When the patient is at rest, it is evaluated by performing a passive flexion and extension of the patient's arm. During turning, the nurse can easily feel the patient's resistance when she is participating in the procedure. A score of 0 is given when no resistance is felt during the passive movements or the turning procedure. A score of 1 refers to resistance during movements or turning. In other words, the patient is tense or rigid. A score of 2 consists of strong resistance. In such cases, the nurse may be unable to complete passive movements or the patient will resist against the movement during turning. The patient may also clench his/her fists.

KEY POINTS:

1. The patient must be observed at rest for one minute to obtain a baseline value of the CPOT.

2. Then, the patient should be observed during nociceptive procedures (e.g. turning, wound care) to detect any changes in the patient's behaviours to pain.

3. The patient should be evaluated before and at the peak effect of an analgesic agent to assess whether the treatment was effective or not in relieving pain.

4. For the rating of the CPOT, the patient should be attributed the **highest** score observed during the observation period.

5. The patient should be attributed a score for each behaviour included in the CPOT and muscle tension should be evaluated last, especially when the patient is at rest because the stimulation of touch alone (when performing passive flexion and extension of the arm) may lead to behavioural reactions.

0	1	2
Relaxed, neutral (no muscle tension)	**Tense** (frowning, brow lowering, orbit tightening)	**Grimacing** (contraction of the whole face: frowning, brow lowering, eyes