

should not intervene in between when the patient is expressing it, but at the same time we can ask questions in between in case we feel some portion of it to be irrelevant.

- Assess what exactly is the effect of pain on their psychological, socioeconomic, and spiritual life.

Detailed history should be taken on the first visit. It is going to be time-consuming and laborious. Pre-consultation questionnaire can play a very important role in solving this issue. They can be used for baseline reference for any kind of pain. While taking the detail history focus should be on the type of pain and the reason behind it. We should start taking history, with a simple introduction about the patient itself, which includes age, education, job, living place, spouse and kids, education, professional life and social environment.

#### **Pain history consists of the following**

- Quantity or severity of pain.
- Quality or nature of pain.
- Mode of onset and location.
- Duration or chronicity.
- Provocative and relieving factors.
- Special character.
- Timing of pain.
- Relation to posture.
- Associated complaints

Some clinicians prefer the mnemonic 'SOCRATES' but it is up to the readers to understand the importance and impact of each subheading in making a diagnosis.

#### **Quantity or Severity or Intensity of Pain**

Pain is a subjective experience. Like many diseases such as hypertension or diabetes, there is no objective measurement for a patient's pain intensity. Unfortunately, we do not have a thermometer like device to measure pain so we need to rely on the patient's statement. Pain is complex neurobehavioral problem affected by psychological, cultural, and environmental factors. The variables to be measured are current pain intensity and

average pain intensity over a specified period of time, e.g. last 1 week or 4 weeks. It is the average pain intensity which is the usual target for pain treatment, both by the clinician and the patient. The goal of treatment in acute or chronic pain is to reduce pain intensity as much as possible while avoiding side effects and to increase the acceptance of the present line of treatment. Numerous pain scales for practical assessment of pain intensity in clinical studies have been developed. The chosen one should be appropriate to the patient's abilities and preferences. These scales are more appropriate for detecting changes within individuals rather than comparison between individuals and also help in assessing the response to treatment.

#### **Types of Pain Intensity Assessment**

Pain can be assessed in two ways, either by unidimensional or multidimensional instruments. We should assess patient's pain with movement not when he/she is lying comfortably in bed.

#### **Unidimensional Instruments**

- **Verbal rating scales (VRS):** In VRS, pain is described as none, mild, moderate, or severe. This is the usual way a patient expresses pain. This scale is short, easy to use and understand, especially in elderly and illiterate. Patient's lack of reproducibility makes this one less suitable for research purposes.<sup>1</sup>
- **The binary scale:** The patient is asked to answer questions like—Do you have a 60% relieve in your pain? "Yes or No". This is short, easy to use and understand. Sometimes patient himself/herself is expressed in this way which can be misleading along with this lack of reproducibility make this less suitable for research purposes.
- **The numerical rating scale (NRS):** It is most commonly used. In this the two extreme experiences of the pain is noted and has a numerical scale between "no pain" and "worst pain imaginable". "Zero" corresponds to no

### Associated Complaints

Associated complaints like weakness, numbness may indicate neurological deficits. Fever may indicate infections, nausea/vomiting also has diagnostic value in migraine, space occupying lesion of brain.

### Understanding the Red Flags or Warning Signals

We must be very cautious in dealing with certain painful conditions which can be potentially dangerous. There should be a multidisciplinary approach to deal with these patients. These vary in different anatomical locations, but the following features (not limiting to the following) in general can be serious.

- Pain with major trauma
- Suspecting tumor
- Suspecting infection with fever, rigor, vomiting, etc.
- Unconsciousness
- Motor weakness
- Progressive sensory deficit
- Loss of vision
- Loss of bladder control with retention and incontinence
- Loss of bowel control with inability to force to pass stool
- Sudden onset pain which is progressing rapidly
- Not relieved by analgesic within a few days.

### Past History

Past history includes any pain events mimicking present, ask for progress, diagnosis and any treatment taken and the procedure/operation done. Past history helps in making a diagnosis, for example history of rash, vesicles in the same dermatome as of present neuropathic pain can confirm postherpetic neuralgia. Because of the periodicity in the occurrence of any diseases they can have the same presentations every time, e.g. cluster headache. Patient with multiple episodes of pain

can have associated significant cognitive disturbance. Patient can have some diseases which can influence the manifestation of pain (e.g. dementia) or it can interfere with treatment (organ damage). History targeted at finding an etiology can also help us in finding the other manifestations of the disease (e.g. multiple sclerosis). Diabetes, hypertension, thyroid disorder, dementia, parkinsonism, liver and kidney compromise, inflammatory disorders should be of more importance on its presence.

### Psychological Assessment History

The patient in pain can have some psychological disorders like anxiety, depression this not only makes patient intolerant to pain but also decreases their tolerance to pain. A lot of tools are available for mental status assessment of patient which includes:

- PHQ-9.
- Beck depression inventory (BDI).<sup>25</sup>
- Hamilton depression scale.<sup>25,26</sup>
- Zung self-rating depression score.<sup>25</sup>
- Hospital anxiety and depression scale (HADS).<sup>27</sup>
- Pain catastrophizing scale (PCS).<sup>28</sup>
- The Tampa scale of kinesiophobia.<sup>29</sup>

#### *Beck depression inventory (BDI)*

This have 21 parameters and each are graded from 0 to 3 thus have a total score of 63. The result will be inferred as below:

- 1–10—ups and downs are considered normal.
- 11–16—mild mood disturbance.
- 17–20—borderline clinical depression.
- 21–30—moderate depression.
- 31–40—severe depression.
- >40—extreme depression

#### *Hamilton depression scale*

It includes 17 parameters with score grade of 0 to 4 (symptom is absent, mild, moderate or severe) thus total score of 54.

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### Mental State Examination<sup>3</sup>

Look whether the patient is awake, alert and responsive to an examiner or surrounding.

Simple and quick way to assess the mental state.

#### Orientation

- **Ask the following**  
What is your full name? What is the year?  
Who is the president?

#### Calculations

- **Ask the following**  
How many paisas in one rupee?

#### Memory

- **Ask the following questions**  
Ask the patient three items to remember (examples: A red ball, a blue telephone, and address 66 Hill Street). Converse with the patient for sometime and ask the patient to repeat the list.

### Speech

- **Ask the patient to repeat two simple sentences**, such as the following:
  - Today is a lovely day.
  - Ask the patient to name some objects which are there in the room? Ask the patient to rhyme simple words such as ball, pat and can.

### Comprehension

- **Ask the patient to do the following**  
Put the right hand on the left hand. Then ask the patient to point to the ceiling with the left index finger.

### Built and Nutrition

Look whether patient is well built, well nourished, or poorly built and poorly nourished. Poorly nourished or cachectic patients are seen in case of malignancy, tuberculosis, etc.

Gait	Features	Diseases
Antalgic gait	Limited range of motion with inability to bear full weight on affected extremity results in limp with slow and short steps.	Degenerative arthritis, injury, fracture, septic arthritis.
Cerebellar gait	Staggering wide based gait, positive Romberg's sign.	Cerebellar CVA, vitamin B <sub>12</sub> deficiency.
Frontal gait (gait apraxia)	Hesitation on starting to walk and on turning.	Dementia, non-pressure hydrocephalus.
Hemiparetic gait	Weak and spastic limb extended and circumducted.	CVA with hemiparesis.
Paraparetic gait	Stiff scissor like walk with leg adduction and extension. Associated with bilateral weakness.	Spinal cord lesions, bilateral cerebral lesion.
Parkinsonism gait	Shuffling gait with short steps.	Parkinsonism.
Pelvic rotational wink	Pelvis rotates >40° in axial plane towards the affected hip. Maladaptive gait allows for terminal hip extension on walking.	Intra-articular hip disorders.
Ataxic gait	Unsteady gait, worse with vision impairment or at night. Positive Romberg's sign	Diabetic neuropathy, vitamin B <sub>12</sub> deficiency.
Stepping gait	Hyperflexed hips and knees on ambulation which compensates for foot drop.	Distal motor neuropathy.
Trendelenburg gait	Pelvis tilts to the normal side while upper trunk tilt to the affected side.	Abductor weakness (gluteus medius) or intrinsic hip pathology.
Waddling gait	Swaying, symmetric, wide based gait with toe walking.	Osteitis pubis, pregnancy, muscular dystrophy.

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