

PROTOCOL FOR ASSESSING PAIN AND STRESS IN CATS

The two tables in this handout were developed by veterinarians to assess pain and stress in cats. Unfortunately, these conditions may not be independent in cats. Furthermore, when cats are exhibiting behavioral concerns, those concerns may be the result of stress and/or pain, or may cause more stress and/or pain.

By using these scales, which are used in hospital and shelter settings, clients can evaluate all the cats in their house when they first have a concern and seek help, and then repeatedly evaluate the cats using the same scales during treatment. Treating behavioral problems is a process, so it is very useful to have a series of objective measures that can be evaluated repeatedly on a regular basis over time.

For clients whose cats are not yet having problems, these scales can and should be used to evaluate all household cats once or twice a year, and when anyone in the household dies

or there are any additions to the household. Any changes or concerns should be discussed with your veterinarian.

REFERENCES

- Hellyer P, Rodan I, Brunt J, Downing R, Hagedorn JE, Robertson SA. AAHA/AAFP pain management guidelines for dogs and cats. *JAAHA* 2007;43:235–248.
- Hellyer PW, Uhrig SR, Robinson NG: Canine Acute Pain Scale and Feline Acute Pain Scale, Fort Collins, 2006, Colorado State University Veterinary Medical Center. www.cvmb.colostate.edu/ivapm/professionals/members/drug_protocols/painscale-caninenobandagesPAH.pdf.
- Kessler MR, Turner DC. Stress and adaptation of cats (*Felis sylvestris catus*) housed singly, in pairs and in groups in boarding catteries. *Anim Welf* 1997;6:243–254.
- McCune S: Temperament and welfare of caged cats. Doctoral dissertation, Cambridge, UK, 1992, University of Cambridge.

TABLE 1

Cat Pain Assessment Scale

| Pain Score | Behavioral Patterns | Response to Palpation | Body Tension |
|------------|---|---|---|
| 0 | Content and quiet when unattended. Comfortable when resting. Interested in or curious about surroundings. | Not bothered about palpation anywhere. | Minimal |
| 1 | Signs are often subtle and not easily detected in a hospital setting but are more likely to be detected at home by clients (<i>if the clients are asked to monitor the cat and schooled in how to do so</i>). Earliest signs at home may be withdrawal from surroundings or change in the cat's normal routine. In the hospital, the cat may be content or slightly unsettled. The cat is less interested in the surroundings but will look around to see what is ongoing. | May or may not react to palpation of wound or surgery site. | Mild |
| 2 | Decreased responsiveness, seeks solitude. Quiet, loss of brightness in eyes. Lies in a curled up posture or sits tucked up with all 4 feet under body, shoulders hunched, head held slightly lower than shoulders, tail curled tightly around body. Eyes partially or mostly closed for either posture. Hair coat appears rough or fluffed up. May intensively groom an area that is painful, sensitive or irritating. Decreased appetite, not interested in food. | Responds aggressively or tries to escape if painful area is palpated or if that area is approached. Tolerates attention, may even perk up with petting if painful area is avoided. | Mild to moderate: reassess analgesic plan |

TABLE 1

Cat Pain Assessment Scale—cont'd

| Pain Score | Behavioral Patterns | Response to Palpation | Body Tension |
|------------|--|--|---|
| 3 | Constantly yowling, growling, or hissing when unattended. May bite or chew at wound, but unlikely to move if left alone. | Growls or hisses at nonpainful palpation. The concern here is that the cat may be experiencing allodynia,* “wind-up,” [†] or fear that the pain could be made worse. | Moderate: reassess analgesic plan |
| 4 | Prostrate. Potentially unresponsive to or unaware of surroundings. Difficult to distract from pain. Receptive to care—even pretty awful cats and wild and feral cats will be more tolerant of contact. | May not respond to palpation. May be rigid to avoid pain induced by movement. | Moderate to severe: reassess analgesic plan |

Modified from Hellyer et al., 2006.

*Allodynia—pain caused by a stimulus that does not normally result in pain (Hellyer et al., 2007).

[†]Wind-up pain—heightened sensitivity that results in altered pain thresholds both peripherally and centrally (consider using antianxiety agents) (Hellyer et al., 2007).

TABLE 2

The Seven-level Cat Stress Score^a

| Score | Body | Belly | Legs | Tail | Head | Eyes | Pupils | Ears | Whiskers | Vocalization | Activity |
|------------------|---|--|---|--|---|--|---------------------------------|--|---|---|---|
| 1 Fully relaxed | I: laid out on side or on back A: NA | Exposed, slow ventilation | I: fully extended A: NA | I: extended or loosely wrapped A: NA | Laid on the surface with chin upwards or on the surface | Closed or half open, may be slowly blinking | Normal (consider ambient light) | Normal (half back) | Normal (lateral) | None or soft purr | Sleeping or resting |
| 2 Weakly relaxed | I: laid ventrally or half on side or sitting A: standing or moving, back horizontal | Exposed or not exposed, slow or normal ventilation | I: bent, hind legs may be laid out A: when standing extended | I: extended or loosely wrapped A: tail up or loosely downward | Laid on the surfaces or over the body, some movement | Closed, half opened or fully/normally opened | Normal (consider ambient light) | Normal (half back) or erect and moved to front | Normal (lateral or forward) | None | Sleeping, resting, alert or active, may be playing |
| 3 Weakly tense | I: laid ventrally or sitting A: standing or moving, back horizontal | Not exposed, normal ventilation | I: bent A: while standing extended | I: on the body or curved backward, may be twitching A: up or tense downward, may be twitching | Over the body, some movement | Normally opened | Normal (consider ambient light) | Normal (half back) or erect and moved to front or back and forward on head | Normal (lateral) or forward with small amount tension | Meow or quiet | Resting, awake or actively exploring |
| 4 Very tense | I: laid ventral, rolled or sitting A: standing or moving, body behind lower than in front | Not exposed, normal ventilation | I: bent A: when standing hind legs bent, in front extended | I: close to the body A: tense downward or curled forward, may be twitching | Over the body or pressed to the body, little to no movement | Widely opened or pressed together | Normal or partially dilated | Erected to front or back, or back and forward on head | Normal (lateral) or forward with tension | Meow, plaintive meow or quiet | Cramped sleeping, resting or alert, may be actively exploring, trying to escape |
| 5 Fearful, stiff | I: laid ventrally or sitting A: standing or moving, body behind, lower than in front | Not exposed, normal or fast ventilation | I: bent A: bent near the surface | I: close to the body A: curled forward, close to the body | On the plane of the body, less or no movement | Widely opened | Dilated | Partially flattened | Lateral (normal) or forward and back | Plaintive meow, yowling, growling, or quiet | Alert, may be actively trying to escape |
| 6 Very fearful | I: laid ventrally or crouched directly on top of all paws, may be shaking A: whole body near to ground, crawling, may be shaking | Not exposed, fast ventilation | I: bent A: bent near the surface | I: close to the body A: curled forward close to the body | Near to surface, motionless | Fully opened | Fully dilated | Fully flattened | Back | Plaintive meow, yowling, growling, or quiet | Motionless alert or actively prowling |
| 7 Terrorized | I: Crouched directly on top of all fours, shaking A: NA | Not exposed, fast ventilation | I: bent A: NA | I: close to the body A: NA | Lower than the body, motionless | Fully opened | Fully dilated | Fully flattened back on head | Back | Plaintive meow, yowling, growling, hissing or quiet | Motionless alert |

^aA further development of the Cat-Assessment-Score by McCune, 1992; from Kessler and Turner, 1997. A, Active; I, inactive; NA, not applicable.