What if you see …?

Analgesics must be administered as outlined in the UCUCA-approved protocol. When “as needed” analgesics are specified, animals must be monitored for signs of pain, and treated accordingly.

Listed below are easily identifiable indicators of pain in rats. This is neither a comprehensive nor specific list, and as such, other observations should be taken into account when assessing pain status in rats. Please contact ULAM veterinary staff for additional assistance with identification and/or treatment of pain.

1. The Rat Grimace Scale images and accompanying descriptions are borrowed verbatim from:


2. Behavioral indicators from:


3. Behavioral indicators from:


   Porphyrin staining

   Porphyrin (a red-brown pigment) is a normal secretion produced by the tear gland around rat eyes. When the animal is not grooming, the pigment builds up around the eyes, nose, and on the fur.

   Behavior

   (B) Rough hair coat and porphyrin staining are indicators of lack of grooming, which is indicative of pain and/or stress.

   (C) When rats are experiencing abdominal pain, they may demonstrate the following abnormal behaviors:

   Cat-like Back Arching

   The animal arches its back upwards; this looks like normal cat stretching, but is abnormal in rodents.

   Writhing

   Lateral contortion of the flank abdominal muscles. It may look like the animal is “sucking in” its stomach.

   Twitching

   A short-lived involuntary muscular contraction of any body part.

References


