Rodent Oral Gavage - Technique





Select appropriate gavage needle for the size of the animal (see Table). Gavage needles can be reusable and made of stainless steel or single use and made of plastic material. Stainless steel needles are often easier to pass but plastic needles are less likely to cause injury. Stainless steel needles can be straight or curved and plastic needles can be bent to the desired shape. A curved needle is often easier to use and less traumatic for passage down the esophagus.

Measure the needle to the proper length by measuring from the mouth to the length of the last rib. Mark the tube and do not pass it beyond this point in order to avoid perforation of the stomach.

Gently restrain the animal so that the forelegs are extended outward and away from the body and the head is back creating a straight line through the neck and esophagus. (Mice are usually scruffed and rats may be held using a modified grip manual restraint.) A small amount of gas anesthetic may prevent struggling and trauma, however deep anesthesia is not recommended due to the risk of aspiration. Gently insert the gavage needle into the oral cavity behind the incisors and allow needle to pass as if falling by gravity and not forced. If there is any resistance, do not force the tube! Pull out and try again. Once placed, inject slowly. Do not inject more than the maximum volume (10ml/kg of body weight =0.1ml/10g of body weight). Then pull straight out with a steady motion.