Intraperitoneal (IP) Injections

Mouse, Rat, Gerbil, Hamster, Guinea Pig

IP injection is frequently performed in rodents. The aim of this technique is to administer material into the space surrounding the abdominal organs, avoiding injection directly into any organ. Restrain rodents with their abdomen exposed (uppermost) and their head pointed downward. This position is thought to cause the freely moveable abdominal organs to move towards the animal's diaphragm making accidental puncture of organs less likely. There are several holding positions that will work for this procedure but the scruff is the most commonly used. The needle is inserted into the abdominal cavity in the animal's lower right quadrant to avoid the cecum and urinary bladder. The needle should be directed towards the animal's head at an angle of 15 - 20 degrees from the skin and inserted approximately 5 mm. Aspiration should be attempted to ensure that an abdominal organ (such as the bladder or intestines) has not been penetrated. If bladder content or intestinal material is aspirated, the syringe and needle must be removed and discarded. Never inject GI tract contents or urine into the peritoneal cavity, as a bacterial or chemical peritonitis will likely result.