

Jugular Bleed Rat Recommended



General anesthesia is recommended for this procedure since the rat must be securely immobilized to prevent permanent damage or death. This procedure also requires two people, one to hold the animal and one to collect the blood.

The anesthetized animal is placed on its back on a solid surface or scruffed securely. The rat's head is extended backward gently, not putting too much pressure on the head or neck. The animal's right forelimb is pushed downward exposing the neck. The right clavicle area of the rat is shaved and cleaned with alcohol.

With one hand, the technician holding the animal keeps the head extended and turned slightly toward the left shoulder. With the other hand, the technician keeps the right forelimb down and applies light pressure to the shoulder region to slightly occlude the jugular vein.

The other technician palpates for the "v" in the sternoclavicular junction.. The jugular vein runs through this region. You may be able to slightly visualize the vein. You may only see a pulse to indicate its presence. Using a 23g needle with a 1ml or 3ml syringe, advance at a 20-30 degree angle while creating a slight vacuum in the syringe. Once you have hit the vein, try to stabilize the syringe and pull back slowly to avoid collapsing the vein. Remove the needle carefully keeping the same angle of entry. Apply pressure to the puncture site until hemostasis is achieved. *This technique can be performed with the mouse but is considerable more difficult and the vein collapses quite easily.*