

ISOFLURANE ANESTHESIA OF MICE IN-PERSON TRAINING

UNIVERSITY OF SOUTH FLORIDA
COMPARATIVE MEDICINE

Attendee Name: _____
Print Sign Date

Discuss/Review:

- ____ Review and know where to find *Guidelines on Anesthesia and Analgesia* (CMDC #086), *Routes of Administration, Volume, and Needle Gauges* (CMDC #087), *Recommended Analgesic Regimens for Mice* (CMDC #229)
- ____ Review SOP 412, SOP 1102
- ____ Review and know where to find and how to use *Rodent Surgery/Procedure Record* (CMDC #139), *Record of General Anesthesia* (CMDC #126)
- ____ Confirming that an anesthetized mouse is in stage 3 **surgical anesthesia** is accomplished by the **absence** of an **interdigital pinch withdrawal reflex**.
- ____ Monitoring an anesthetized mouse is accomplished by carefully observing for a reduction in **breathing movements**, and a **change from** the normal **pink** color of tissues of the anesthetized mouse.

Demonstrate/Assess:

- ____ All surfaces of the anesthesia machine are **cleaned** with Oxivir spray and wipes.
- ____ Confirm that oxygen **flow gauge** is "off", the oxygen **tank valve** is "open" and oxygen **gauge** is >100PSI
- ____ Confirm the vaporizer isoflurane fluid level
- ____ Review how to fill the vaporizer to the "red" indicator line
- ____ Confirm that charcoal waste anesthetic gas scavenger canister weight has been recently recorded
- ____ Review the four **induction chambers** ("quad") and **toggle switch** controls
- ____ Understand the use and consequence of the toggle switch when "off", "on", or "flush"
- ____ Know that each induction chamber is "airtight"
- ____ Review the "Bains" **breathing circuit** tubing and rodent-specific nosecone
- ____ Review vaporizer dial settings
- ____ **Induction** typically achieved at **2-3%** isoflurane vaporizer dial setting
- ____ **Maintenance** typically achieved at **1-2%** isoflurane vaporizer dial setting
- ____ Review that **oxygen flow rates** should be kept low around **0.5 L/minute**
- ____ Review that loss of a **righting reflex** during induction is an indication to move from chamber to breathing circuit nosecone
- ____ Artificial tears should be applied to eyes after induction when moving to nosecone
- ____ Maintenance anesthesia requires a **supplemental heat source** such as a circulating warm water pad
- ____ Confirm appropriate depth of **surgical anesthesia** by **absence** of an **interdigital pinch withdrawal reflex**.
- ____ Monitor appropriate depth of maintenance anesthesia by observing for **breathing movements** every second, and for **pink** tissues of the anesthetized mouse.
- ____ Recovery is accomplished in a clean dry recovery box lined with paper towels and provided with a supplemental heat source.
- ____ Mouse is closely monitored until **capable of righting** itself and purposeful movement.
- ____ **Upon completion**, the vaporizer is dialed to 0%, "off", a click will be heard.
- ____ Then, the oxygen flow gauge is turned "off", down to 0L/minute.
- ____ Then, all toggle switches are placed in the "off" position.
- ____ Then, the oxygen tank valve is turned "off".
- ____ Then, one toggle switch at a single induction chamber is used to empty the machine.
- ____ Then, all surfaces of the anesthesia machine are again cleaned with Oxivir spray and wipes.

Training & assessment provided by: _____
Print Sign Date

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