

FLSC Standard Operating Procedures for Mice in Dystocia

Purpose

With the large number of mice in the FLSC/RCH breeding colonies it is inevitable that dystocia will occur. Although there are a small percentage of female mice that experience dystocia, these procedures are in place to standardize the veterinary care affected mice receive and to maximize a positive outcome for the dam and the litter.

Procedure

1. Assess the hydration status by pinching a tent of skin on the nape of the neck. If it takes > 2 seconds for the skin to return to position, administer an initial 0.5 ml of warm sterile saline SC.
2. If unsure that pups remain, gently palpate the abdomen to assess if pups are within the dam.
3. Examine the vulva and vaginal canal. Pups that are visible within the canal can be gently removed by pulling them out using a gauze sponge or forceps.
4. Lubricate the vaginal canal and surrounding area.
 - a. Use a moistened cotton-tip swab.
 - b. Suggested moistening agents include sterile saline, artificial tears, or white petroleum based ointments.
5. Additional fluids will be administered.
 - a. Fluids are given at 3 hours intervals if needed at 0.1 ml SC.
 - b. Fluids are injected at a site distant to any previously given fluids.
 - a. Typically, no more than two to three injections are needed.
6. Do not give IP injections.
 - a. Most of the abdominal cavity is filled with the gravid uterus.
 - b. Restraint for IP injection can compromise respirations in the dam.
7. Place dam's cage on warming pad and monitor closely.
8. Assist with parturition by pulling any pups that lodge within the vaginal canal.
9. Any dam which becomes moribund or hypothermic as judged by touch should be euthanized. Any pups from a dam which has been euthanized should either be fostered onto a dam that has a similarly aged litter (with the total number of pups placed on any one female not to exceed her original litter number), or they should be euthanized.
10. Oxytocin is not used, as it has been published that there is no evidence that oxytocin aids parturition in mice and may even delay delivery.

References

1. Narver HL. Oxytocin in the treatment of dystocia in mice. *JAALAS*, 51, 10-17, 2012.