Dystocia

Dystocia is the condition of difficult birth. This condition typically occurs in 1) primiparous (first time) dams, 2) dams with a history of dystocia and 3) some transgenic lines. Dystocia can occur due to large pup size, pup mal-positioning, pup obstruction in the uterus or cervix, or uterine inertia.

Most rodent species deliver offspring during the late night or early morning. Therefore when a dam exhibits straining or delivery of pups during the daytime, this is likely due to dystocia. Early intervention is critical to pup survival! Conservative management can be attempted; however, pup survival is most successful with early Caesarian section and cross-fostering to a lactating dam.

For breeding colonies with valuable animals and a history of dystocia, it is prudent to establish a colony of cross-fostering dams that can serve as maternal surrogates for the pups. Successes in choosing a nurturing cross-fostering dam include selecting a strain of behaviorally maternal dams (e.g., CD-1) and selecting dams that have produced successful litters.

Stress is a significant factor contributing to dystocia. Therefore stress reduction is an important management strategy to prevent its onset. Factors that can help reduce stress in the breeding colony include 1) providing ample nesting material and breeder huts (Shepherd Shacks or Breeder Igloos), 2) reducing any unnecessary noise, vibrations and bright light for pregnant dams, 3) in some strains it is helpful to remove the sire after breeding to reduce stress to the dam, 4) providing sufficient nutrition (breeder chow) to support the pregnant dam.