

# Mastitis

Cause of joey rejection

## What is Mastitis?

Mastitis is an infection of the mammary tissue that results in pain, swelling, warmth and redness.



# Clinical Mastitis

- **Clinical mastitis** is an inflammatory response to infection causing visibly abnormal milk (eg, color, fibrin clots). As the extent of the inflammation increases, changes (swelling, heat, pain, redness) may also be apparent. Clinical cases that include only local signs are referred to as mild or moderate. If the inflammatory response includes systemic involvement (fever, anorexia, shock), the case is termed severe. If the onset is very rapid, as often occurs with severe clinical cases, it is termed an acute case of severe mastitis. – *Merck Veterinary Manual*

# Sub-Clinical Mastitis

- **Subclinical mastitis** is the presence of an infection without apparent signs of local inflammation or systemic involvement. Although transient episodes of abnormal milk or inflammation may appear, these infections are for the most part asymptomatic and, if the infection persists, are termed chronic. Once established, many of these infections persist for entire lactations or the life of the animal. – *Merck Veterinary Manual*
- A subclinical animal, while appearing unaffected by the illness, may experience a reduction in milk production, and certainly represents a possible source of infection for other animals, who can become subclinical sufferers themselves, or may go on to show clinical signs of the illness, due to differences in immune status between animals. - *AHDB*



# Clinical Symptoms

- Tenderness or warmth to the touch (difficult to determine in sugar gliders)
- Generally feeling ill
- Swelling
- Pain or a burning sensation continuously or while nursing
- Redness
- Fever

# Visible Symptoms

- Unusual Crabbing
  - Can occur when not nursing and/or mate not in pouch
- Pushing joeys away/not allowing them to nurse
- Joey not gaining/losing weight
- Rejection



# Causes

- Blocked milk duct
- Bacteria entering the teat

# Healthy Mammary System in Sugar Glider



This is a perfect example of a healthy looking mammary system.

- Full of Milk
- Typical Pink Skin Coloration
- Not sensitive to the touch
- Nursing Joeys without issue



# Mastitis in Sugar Glider



Infected mammary system

Owner Observed Symptoms:

- Swelling
- Red
- Veins Very Prominent
- Low to No Milk Production
- Starving Joey
- This was Caught VERY early

## Comparison: Healthy vs. Mastitis Infected





# Diagnosis and Treatment

- Sugar Glider **MUST** be taken to a Veterinarian
  - The presence of a causative pathogen is done via a bacteriological culture
- Antibiotics will be administered as determined by the Veterinarian
  - Trib (Sulfamethoxazole)
  - Metacam
  - Antibiotics/Anti-inflammatory that are safe for sugar gliders

# Pulling Joeys

Joeys should be pulled if mastitis has been diagnosed. Milk will have a salty taste that is not palatable to joeys. This could cause a joey to not want to nurse even if the mom is not symptomatic. The infectious material in the milk should not be consumed by the joey.



# Sources

- Merck Veterinary Manual
- AHDB (Agriculture & Horticulture Development Board)
- Treasured Gliders (Photos)