Guinea Pigs
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Albino guinea pigs are actually not albino at all, but "acromelanic."
Mammary glands
Two inguinal conical nipples.
2-4 pups per litter. (Not "piglets"!)
Boars have prominent vesicular glands which have been misinterpreted as uterine horns!
Vaginal closure membrane
The membrane is open at estrus, parturition, and day 26-27 of gestation.
Walls of pulmonary arterioles are naturally thick.
Pulmonary lymphoid nodules
Pregnancy imminent delivery signalled by separation of symphysis. Pups are precocious.
Normal inclusions in leukocytes – elevated in pregnancy and with estrogen supplementation.
Kurloff bodies
Most common in spleen in non-pregnant animals.
In pet guinea pigs, is important.

Mortality most common in young guinea pigs in winter.

Interspecies transmission can occur.

Transmission is primarily airborne.

Bordetella bronchiseptica
Fibrinous pleuropneumonia

- Not common today,
- but infected colonies can have up to 50% carriers.

Streptococcus pneumoniae
Necrotizing bronchopneumonia
• Focuses on airways
• Low morbidity and mortality, so current estimates of incidence may be low.

Adenovirus infection
Rhabdomyomatosis

Incidental finding – foci of glycogen laden cardiomyocytes.
May affect soft tissues or viscera. 
Cause unknown by dietary factors are suspected.
Malocclusion

Continuous growth like other rodents.

Overgrown cheek teeth a worse management problem than incisors.
Rarely clinical
Inclusions also in liver, spleen, lung, kidney
Systemic disease in weanlings, rarely in pregnant animals.

Cytomegalovirus
Gastric torsion/bloat
Common in breeding colonies

- Weanlings
- Clinical disease is seen only with heavy infections

*Eimeria caviae*
Fecal impaction

Seen in older guinea pigs due to muscle atrophy or impaired cecotrophy.
Cavian leukemia

C-type retrovirus

Usually lung

Adults

Usually associated with leukemia

Malignant lymphoma
Liver – leukemia – percy
Malignant lymphoma

Leukemia may reach $>150,000$ mm$^3$

Cells are lymphoblastic
Guinea pigs require Vitamin C supplementation.

Vitamin C is a cofactor of lysyl oxidase and proline hydroxylase, which are integral in tropocollagen formation.
Bumblefoot
• Predisposed by poor sanitation, rough flooring, unclipped nails.
• May develop osteomyelitis
• "Weepy eye" 
• Chlamydophila psittaci 
• Widespread self-limiting disease 
• Young guineas can see genitourinary and respiratory lesions.

Guinea Pig Inclusion Conjunctivitis
Glomerulosclerosis is a multifactorial disease of glomeruli that occurs in patients over 1 year of age. The cause is unknown, but glomeruli are largely spared.
Urinary calculi

• Proximity of urethra to anus in older sows predisposes to E. coli cystitis.
Guinea pig harem says ‘hello Sooty’

A GUINEA pig called Sooty had a night to remember after escaping from his pen and tunnelling into a cage of 24 females.

He romanced each of them in turn and was yesterday the proud father of 43 offspring.

Staff at Little Friend’s Farm in Pontypridd, South Wales, have now secured Sooty’s pen — and begun looking for homes for the guinea pigs.

His owner, Carol Feehan, 42, said: “I’m sure a lot of men will be looking at Sooty with envy.

“We knew that he had gone missing after wriggling through the bars of his cage.

“We looked for him everywhere but never thought of checking the pen where we keep 24 females. We did a head count and found 25 guinea pigs — Sooty was fast asleep in the corner.

“He was absolutely shattered. We put back in his cage and he slept for two day.