

Belman Laboratories veterinarians Dr. Dante Tuyay & Dr. Alexander Aggasid regularly conduct free ASK YOUR VET! seminars nationwide.

At hog raising seminars held in Atimonan, Lopez, and Lucena in Quezon, attendees were interested to know more about MMA.

ASK YOUR VET!

For free guides or advice on raising hogs, poultry, or fighting cocks:
 Call or text: 0917 - 530 6528 (Globe)
 0908 - 886 7747 (Smart)
 0932 - 843 0682 (Sun)
 (632) 712 0201 (Landline)
 Email: belman.askyourvet@gmail.com

What is MMA?



Dr. Dante Tuyay of Belman Laboratories with the seminar attendees of Lucena City, Quezon last June 27, 2014

Can it be prevented?

What is the best treatment for MMA?

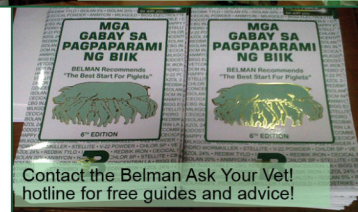


It's a full house at the free seminar in Lopez, Quezon held on May 5, 2014



A hog raising seminar for the benefit of repatriated OFWs in Atimonan, Quezon held last October 2013

Lucena's channel 12 reporter interviews Dr. Tuyay about hog raising



Contact the Belman Ask Your Vet! hotline for free guides and advice!

MMA (Mastitis, Metritis, and Agalactia)

Mastitis is the bacterial infection of mammary glands. **Metritis** refers to an infection of the uterus. **Agalactia** is the reduction, or total loss, of milk production by the sow.

MMA is a complex syndrome that occurs during or shortly after the sow's farrowing period. Signs of MMA include restlessness, loss of appetite, anorexia, and constipation. It is also associated with urinary tract infections and dystocia.

A multifactorial disease, MMA could flare up due to insufficient water intake, inadequate feeding patterns, lack of exercise, farm management and fixture errors, and most commonly, bacteria. Endotoxins (toxins released by bacteria) are also suspected to trigger uterine infections and mastitis.

Promote intestinal health to prevent MMA

The keys to averting MMA are to maintain intestinal motility and boost the appetite. Prevent constipation as much as possible before and during farrowing. Feces that remain in the colon for prolonged periods allow bacteria (such as E. coli) to proliferate and permeate through intestinal walls, and subsequently "leak" into the blood stream.

Treatment of MMA

The treatment of affected sows must be directed toward establishing milk flow in order to sustain the health and lives of the piglets, and furthermore prevent secondary complications on the sow.

Special antibiotic treatments for MMA like Beta-lactam have bactericidal effects, but can increase the liberation of endotoxins. Hence, the additional use of corticosteroid is recommended to reduce inflammation and shorten recovery period. Research has revealed an 8% increase in piglet liveability due to the complementing effects of antibiotics and corticosteroid, along with an oxytocin preparation like Ilualcin (which stimulates the ejection of milk into the sow's breast ducts).

Stellite, or Penicillin-Streptomycin-Dexamethasone, is a Beta lactam-aminoglycoside with corticosteroid antibiotic combination. It accords broad-spectrum bactericidal activity against gram-positive and gram-negative bacteria, when both or simultaneous antibacterial and anti-inflammatory therapies are required. It is well tolerated by the animals in therapeutical doses and has a wide margin of safety.

Effective synergism of antibiotics + corticosteroid

The mode of action (MOA) of Penicillin interferes with the final stages of bacterial cell wall synthesis, causing disruption of the osmotic pressure gradient with ensuing lysis and cell death. The MOA of Streptomycin Sulfate modifies the permeability of the cell wall and interferes with prokaryote protein synthesis and cellular respiration by irreversibly binding to the 30s ribosome subunit to cause a misreading or miscoding of the RNA. When used in combination, a drug affecting the permeability of the cell membrane (e.g. Streptomycin) plus a drug affecting the cell wall (e.g. Penicillin) may be more effective than either drug used alone. In this case, there is an evidence of synergism between the two drugs plus complementing anti-inflammatory effects.

