BPEX 2TS

Knowledge Transfer Bulletin

BREEDING

Mastitis, Metritis, Agalactia (MMA)

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Mastitis, metritis and agalactia, commonly referred to as MMA, is a complex syndrome seen in sows shortly (12 hours to 3 days) after farrowing. It is caused by a bacterial infection of the mammary glands (udder) and/or the urogenital tract. MMA leads to increased piglet mortality and reduced weaning weights.

- **Mastitis**

  A bacterial infection of the udder. In many cases only one or two glands are affected

- **Metritis**

  An infection of the uterus, presented as vulval discharges

- **Agalactia**

  A reduction, or total loss, of milk production by the sow. Often not detected until the nursing litter show signs of hunger and/or weight loss.

Clinical signs

As well as mastitis, metritis and agalactia, clinical signs include constipation, fever (+ 1.0–1.5 °C) and anorexia (1–2 days). Inappetence is often the first sign to be noticed, along with restlessness during suckling and a loss of condition in the litter. Few cases of MMA show all signs together and signs tend to be farm-specific. In some cases low milk production and depressed daily liveweight gain of piglets may be the only indication of the problem.

Diagnosis

Diagnosis is based on clinical signs, particularly inappetence in the sow and a reduction in the condition of the litter. The udder can be palpated (felt) on both sides by running a hand under both lines of glands; individual glands that are affected will feel firm and hot. The presence of mastitis can be confirmed by testing the milk; collection will require oxytocin injection to stimulate milk let down.

The litter should also be examined as diarrhoea, septicaemia or hypothermia may lead to decreased intake of milk and an excess of milk in the udder, which could trigger the drying off process.

Treatment

- You should always consult your vet for advice on treating MMA
- Treatment usually includes the use of antibiotics and medicines to reduce inflammation and injecting products to stimulate milk production
- Small doses of oxytocin can help, although shouldn't be necessary if piglets are suckling regularly; if used early on, oxytocin may reduce the need for veterinary input
- Treatment should be given as soon as MMA is diagnosed or if sow body temperature rises above 39.4°C, 12–18 hours post farrowing
- The sow should be encouraged to drink by regularly stimulating her to rise
- Some sows recover without any treatment, however, by the time this happens, the litter will have suffered
- Once problem litters are identified, steps should be taken to avoid piglets becoming dehydrated, to provide an alternative source of energy and to stimulate milk production
- Small piglets may need to be transferred quickly to another sow with good milk production.

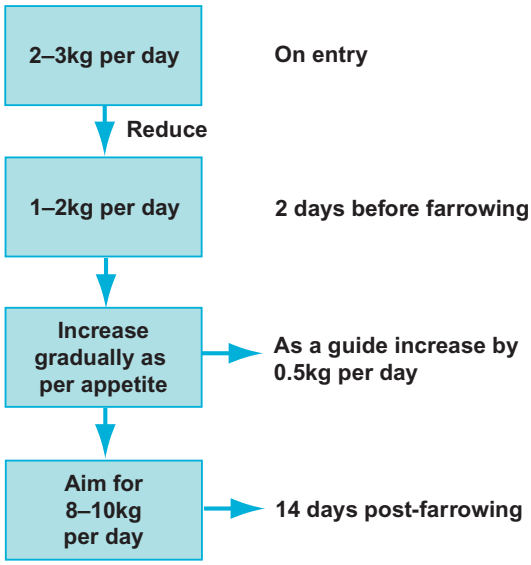
Control and Prevention

- The most effective prevention of MMA is good hygiene
- The farrowing pen and the sow must be kept clean and dry throughout this period to reduce bacterial challenges. This requires an effective cleaning and disinfection protocol
- Sows that get more exercise before farrowing and in the early stage of lactation may be less prone to developing MMA
- Avoid slippery floors which are one of the main causes of reduced activity in lactating sows

Good drainage will help keep sows clean and dry

- Fat sows (body condition score 4+) are more disposed to MMA, as are those given excessive feed before farrowing
- Make sure adequate water is available to sows at all times; lactating sows require 15–30 litres per day.

Feeding guidelines for sows in the farrowing house



Metritis

- To reduce the risk of metritis, strict hygiene must be practiced
- If you have to intervene, consider using protective clothing and equipment eg disposable gloves
- Consult your vet as to whether or not it is advisable to administer antibiotics after intervening
- Keep the back of the sow clean and dry, make sure there are no leaking drinkers.

Agalactia

- Take advice from your vet/nutritionist
- Consider the genotype of your sows and feed appropriately so that you are not overstimulating milk production which could lead to the udder not being emptied and triggering drying off.

Further information

Action for Productivity 10: Cleaning and disinfection
Action for Productivity 16: Water quality and flow rates
Action for Productivity 17: Colostrum
Action for Productivity 20: Condition scoring sows

Pig Signals: Piglets/Sows (www.pigsignals.com)

For more information and advice contact:

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