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## RESEARCH ARTICLE

# CLINICAL MANAGEMENT OF MASTITIS-METRITIS-AGALACTIA SYNDROME (MMA) IN A SOW

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## ABSTRACT

A 4 year old sow owned by a farmer was attended with the history of farrowing 12 hours ago and complaint of anorexia, restlessness, inattentive to her piglets and agalactia. The rectal temperature was elevated with visible congested mucus membrane. The mammary glands were swollen with pain on touch. Foul smelling mucopurulent vaginal discharge was also noticed. Based on the clinical signs, the case was tentatively diagnosed as Mastitis-metritis-agalactia syndrome (MMA). The animal was treated with ceftiofur sodium, oxytocin and flunixin meglumine along with supportive therapy. On 2nd day post treatment, the animal showed complete recovery with disappearance of all the symptoms. Thus prompts diagnosis and quick treatment may save the animal in such life threatening cases along with reducing the pre-weaning piglet mortality.

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## INTRODUCTION

Pig rearing is an important component of Animal husbandry, particularly in North eastern region of India. Being a prolific breeder it is gaining popularity as a meat animal in this region of the country dominated by non vegetarian population. Several managemental factors influence the incidence of diseases in pig farms, out of which Mastitis- Metritis- Agalactia (MMA) syndrome is a wide spread disease of pig with multiple etiology, that inflicts considerable economic damage causing severe piglets mortality.

Infectious organisms like *E coli*, *Streptococci sp*, *Staphylococci sp* etc. are involved. Lack of exercise, endocrine factor, toxic factors have a contributory role in the causation of the disease (Roberts, 1971). The disease occurs within 12- 48 hours after farrowing and is characterised by anorexia, restlessness, inattentive to the piglets, fever, agalactia, swelling of mammary glands (Radostits et al., 2006). It was reported that 20-25% of

pre-weaning piglet loss is due to this syndrome (Kumaresan et al., 2006).

## Case Report

A sow with the history of anorexia after farrowing was attended in a pig farm situated in Khanapra area, Guwahati, Assam. The owner reported that the sow farrowed 9 piglets 12 hours ago and since then it was anorectic, restless and inattentive to her litters. The animal was very weak and was in lateral recumbency. Rectal temperature was recorded as 105.4<sup>0</sup> F. On examination, visible mucus membranes were highly congested. There was swelling of the mammary glands with evidence of pain on palpation. Mucopurulent vaginal discharge was noticed with fetid smell. The case was tentatively diagnosed as MMA syndrome based on the clinical signs and examination carried out (Kumaresan et al., 2009).

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## RESULTS AND DISCUSSION

The treatment was started with Ceftiofur Sodium @ 2.0mg/kg IM daily for 3 days, Flunixin meglumine @ 0.25 mg/kg IM daily for 3 days and Oxytocin @ 20 IU IM twice daily for three days. Supportive therapy comprising intravenous administration of Normal saline, multivitamin injection and seratiopeptidase blous was continued for 3 days. The sow showed an uneventful recovery 2 days post treatment with increased appetite, milk production, alertness and normal temperature.

It is well evident regarding the involvement of multiple infectious as well as endocrine and nutritional factors causing MMA in pigs. Therefore, administration of antibiotic might enhance the quick recovery whereas, oxytocin causes let down of milk and contraction of the uterus (Kumaresan et al., 2009). Thus it may be concluded that the administration of ceftiofur sodium with flunixin meglumine and oxytocin is an effective treatment regime in the treatment of MMA in sows.

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## References

- Kumaresan, A., Bujarbaruah, K.M., Pathak, K.A., Chhetri, B. And Ahmed, S.K. 2009. Clinical Management of Metritis-Mastitis-Agalactia Syndrome. *Intas polivet.*, 10(1):117-119
- Kumaresan, A., Pathak, K.A., Bujarbaruah, K.M. and Das, A. 2006. Swine production in Mizoram, Research Bulletin No 48. Published by ICAR Research Complex for NEH Region, Barapani, Meghalaya
- Radostits, O.M., Gay, C.C., Hinchcliff, K.W. and Constable, P.D. 2000. *Veterinary Medicine*, 10<sup>th</sup> Edn, Elsevier publication, UK, 754-759
- Roberts, S.J. 1971. *Veterinary obstetrics and Genital Diseases*. 2<sup>nd</sup> Edn, CBS publication, New Delhi, pp 660.

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