The 5th European Symposium of Porcine Health Management

International Pig Topics recently attended The 5th European Symposium of Porcine Health Management, which was held in Edinburgh, Scotland. Here we review some of the topics that were covered in the technical sessions and during poster presentations.

Peracute outbreak of Haemophilus parasuis infection

Odd Magne Karlsen et al, Norwegian School of Veterinary Science, Oslo, Norway

In an outbreak of Haemophilus parasuis infection in SPF pigs there was 19% mortality in two to three week old piglets from 82 litters over 2.5 days. Piglets died with no prior signs of disease and post mortem examinations revealed septicaemia and anaemia and H. parasuis was cultured from most tissues. Injection with procaine penicillin countered the mortality.

Protection against newly emerged H1N2 influenza virus

Ralf Dürrwald et al, IDT Biologika GmbH, Dessau-Rosslau, Germany

From 2009 pandemic H1N1 was frequently seen in pig herds across Europe. In central Europe viral reassortment with H3N2 occurred producing H1N2 influenza virus. A new vaccine against H1N2 was produced.

Worldwide occurrence of fumonisins

Diego Padoan, Biomin Holding GmbH, Herzogenburg, Austria

This paper reported results between 2004 and 2011 in which more than 9,000 feedstuffs samples were screened for fumonisins (fumonisin B1 + fumonisin B2). Some 62% of samples from southern Europe and 56% of samples from central Europe were contaminated with fumonisins. The figure for Eastern Europe was 27%, whereas South American and African figures were 80 and 76% respectively.

Diagnosis of Leptospirosis

Susanna Williamson et al, AHVLA, Bury St Edmunds, UK

An improved diagnostic PCR was introduced in 2011 to detect pathogenic leptospires. Since its introduction five outbreaks of leptospirosis were diagnosed in 2011-12 compared to just two in 2005-10. The outbreaks were either systemic disease in growing pigs or reproductive disease in breeders. The PCR detects pathogenic leptospires but did not identify the serovar. To do this still required serology.

Post weaning diarrhoea and Streptococcus suis in piglets

Wouter Depondt et al, Huvepharma NV, Antwerp, Belgium

On a 300 sow unit that was PRRS and Mycoplasma hyopneumoniae positive recurrent outbreaks of post weaning diarrhoea and streptococcus suis infection were encountered. Mortality was 4% and 10 week weights of 22.7kg were being achieved. Then M. hyopneumoniae was diagnosed and treatment was switched to Tilmovet at 16mg per kg feed for 14 days after weaning and KetoProPig at 3mg per kg from day five to day 11 post weaning. In addition to controlling the M. hyopneumoniae this treatment also controlled the post weaning diarrhoea and the Streptococcus suis. As a result mortality dropped from 4.0 to 1.5% and weight increased by 4.7%.

Klebsiella septicaemia in piglets

Cornelia Bidewell et al, AHVLA, Bury St Edmunds, UK

Septicaemia caused by Klebsiella pneumoniae was diagnosed in six pig units between July and September in 2011 and on three units in July/August 2012. Typically pigs were found dead with lesions of septicaemia from which K. pneumoniae was isolated. The disease occurred in pre-weaning piglets from two weeks of age. On analysis these isolates were identical and differed from previous UK isolates.

Streptococcus suis type 7

C. Unterweger et al, University of Veterinary Medicine, Vienna, Austria

This presentation described Streptococcus suis type 7 infection in an Austrian piglet producing farm with 1,000 sows. Two weeks after weaning piglets at five to eight weeks developed symptoms of meningitis and arthritis and mortality was about 2% despite antibiotic treatment. Newborn piglets were routinely given cetiofur on day 3 and treated with amoxycillin for 10 days.

PRRSV elimination from a gilt rearing farm

Katja Brase et al, Vet Practice Heeslingen, Germany

In December 2011 PRRSV antibodies were detected in blood samples from a previously negative gilt rearing farm in northern Germany. No clinical signs were seen and the virus was probably introduced by trucks. In PRRSV positive buildings all animals were vaccinated twice with 2ml of Ingelvac PRRS MLV. The vaccinated animals were eventually moved out and their buildings cleaned and disinfected and restocked with PRRSV negative animals. Since February 2012 no PRRSV animals have been detected by blood testing.

Risk assessment of introducing PRRSV via semen

Christina Nathues et al, University of Berne, Switzerland

Switzerland imports PRRSV from infected European countries. A quantitative stochastic model was set up with data from 2010. It concluded that one positive ejaculate could be imported every six years and that this would infect 10 sows in one herd. Thus, there was a real risk of importing PRRSV into Switzerland and that measures to enhance the safety of imported semen should be enhanced. Subsequent to this a PRRSV outbreak occurred following the importation of infected semen.

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Continued from page 9 A new E. coli and Clostridium Spp combination vaccine

M. R. T. M. Martens et al, MSD Animal Health, Boxmeer, Holland

A study was carried out using a new E. coliclostridium combination vaccine on a farm which had a high level of piglet mortality against which a traditional vaccine was not working. Over a period of eight months sows and gilts were vaccinated with either the new vaccine or with the previously used one. This occurred six and two weeks prior to their estimated farrowing date and sows were revaccinated with a single dose of the appropriate vaccine in their next pregnancy. The sows vaccinated with the new vaccine had better general health and appetites and their piglets performed better (first week mortality 2.8 vs. 5.9% and piglets requiring antibiotics during the first 10 weeks 3.8 versus 9.3%).

Severe acute gastritis in grower pigs

B. W. Strugnell et al, AHVLA, Thirsk, UK

This presentation described an outbreak of acute gastritis in grower pigs associated with monophasic Salmonella typhimurium infection following the withdrawal of acidified water. Sudden deaths were seen in 10 week old grower pigs on an indoor, full slatted, PRRS positive, enzootic pneumonia positive, wean to finish pig unit. Pigs were found dead 5-10 days after being moved on to the unit. Post mortem examinations showed a severe acute gastritis with marked mucosal congestion and mucus deposition. Salmonella typhimurium 4,12:1 phage type 193 was cultured from stomach contents, colon and liver and from mouse droppings found on the farm.

Field case of classical swine fever with PCV-2 co-infection

Metta Makhanon et al, Novartis, Bangkok, Thailand

A case of classical swine fever occurred in a 6,000 sow farm. Congenital infection was found in three day old piglets from gilts. At the outset acute clinical signs included cyanotic discolouration of the skin of the abdomen, inner thighs and ears and, on post mortem, haemorrhagic lesions were seen in lymph nodes, tonsils, kidney, bladder, stomach, lung and subcutaneously. The chronic form of the disease was then seen in young sows. The picture seen in the piglets included tremor and posterior paresis. It is thought that this may have been influenced by immunosuppression caused by PCV-2 co-infection.

PCV-2 in sow oviducts

F. Joisel et al, Merial SAS, Lyon, France

PCV-2 has been implicated in reproductive disorders so this study looked at PCV-2 prevalence in the reproductive tracts of culled sows. In an 84 sow herd that was PRRSV free, sows were routinely vaccinated against parvovirus but not against PCV-2. In September 2010 an abnormal number of returns to oestrus was accompanied by a seroconversion to PCV-2. Five sows from parities 1-3 were culled and their oviducts examined. No immunohistochemical staining suggestive of PCV-2 was found, but PCV-2 DNA was found in two animals and these were the two gilts.

Mass vaccination for PCV-2

Karine Hauray, Bourg en Bresse, France

This poster detailed the use of mass sow vaccination on a 170 sow farrow to finish operation that was infected by PCV-2 and affected by reproductive failure. The sows were vaccinated with Ingelvac CircoFLEX. Before vaccination the farrowing rate was 81.7% and after it was 88.7%. Similar figures for piglets born alive and weaned per sow were 12.2 and 12.9 and 10.1 and 10.9 and no difference was seen in pre-weaning mortality. This was because farm management did not respond to the greater born alive figure, which resulted in more piglets being crushed.