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MEETING ABSTRACTS

PORCINE MYCOTOXIC NEPHROPATHY IN THE CZECH REPUBLIC - OCCURRENCE OF OCHRATOXIN A IN PIG KIDNEYS IN YEARS 2012-2021

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Mycotoxic nephropathy of pigs is mainly associated with ochratoxin A exposure, so it is a chronic poisoning. Ochratoxin A is a mycotoxin produced by several species of fungi from the genera Aspergillus and Penicillium on a wide range of agricultural commodities used for feed production. The severity of the disease is determined by the amount of ochratoxin ingested and the duration of its action. Lower concentrations of ochratoxin A in the feed may not cause obvious clinical signs, but lead to findings during pathological-anatomical examination of the kidneys of slaughtered animals. In addition to nephrotoxicity, which can lead to kidney failure and animal death, it can also cause immunosuppression in pigs and increase susceptibility to secondary infections. In pigs, the highest concentrations of ochratoxin A are usually found in the blood, followed by the kidneys, liver, muscles and fat. The concentrations depend on the amount of ochratoxin A in the feed and, as it cumulates in the body due to enterohepatic cycle, also on the duration of feeding the contaminated feed. The aim of this paper is to evaluate the content of ochratoxin A in pig kidneys, which were examined in the Czech Republic during the regular monitoring of the safety and quality of food of animal origin during the years 2012-2021 and assess the risk of chronic poisoning by this mycotoxin in pigs in the Czech Republic.

Keywords: mycotoxin; nephrotoxicity; OTA