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Morphological Changes in the Kidneys of Pigs Caused by Ochratoxin-Feeding on the Slaughter house- Case report

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Abstract The fungus *Penicillium*, as well as some types of *Aspergillus* may produce toxins, primarily ochratoxin, citrinin and penicillin acid, alone or in combination cause damage to the kidneys and liver. Ochtatoxin A at a rate of 0.2 mg / kg of food as well as greater concentrations in pigs causes nephropathy in a few weeks. Classic pathomorphological changes ochratoxicosis pigs include elevated, pale and claim kidneys. Pathological-histological changes in the kidneys are in the form of necrosis of the proximal parts of the tubules. In one slaughterhouse are having routine inspection pig kidney established pathomorphological changes produced ochratoxin action. The aim of this study was to point out the morphological changes that occur in the kidneys of pigs caused ochratoxin action

Key words: pigs, ochratoxin, kidney, slaughter house.

INTRODUCTION

Ochratoxicosa are medical conditions that arise as a result of food intake (mixtures) of ochratoxin the body. Pig food is often contaminated by saprophytic fungi. Growth and reproduction of mold on food depends on the environmental conditions and proper nutritive substrate temperature and humidity. Poisoning of pigs caused moldy food containing certain molds produce toxins called ochratoxin. In the fall of ochratoxin A and ochratoxin B, and citrinin. Ochratoxin A and B produces seven kinds of molds of the genus *Aspergillus* and *Penicillium*. These fungi attack many nutrients such as corn, wheat, barley, rye, soy, beans, sunflower, sunflower meal, yeast, animal feed, and all the feed mixture of different categories of pigs. Ochratoxin is nephrotoxin.Toxin citrinin products mold *Penicillium citrinum*. This fungus often attacks corn, barley, wheat, rice. Citrinin is also nephrotoxic, who also toxic pig (Kotowski et.al 1993 Ožegović and Pepeljnjak 1995 Milićević et.al 2006, 2007,2008.

The aim of this study was to point out the morphological changes that occur in the kidneys of pigs caused ochratoxin action

MATERIALS AND METHODS

On the slaughter line during a routine examination of the kidneys of pigs are established patomorphological changes produced ochratoxin action

RESULTS AND DISCUSION

Classic pathomorphological changes ohratokoskoze pigs include elevated, pale and claim kidneys. (Fig.1, 2, 3, 4). In severe cases, the affected kidney glomeruli.

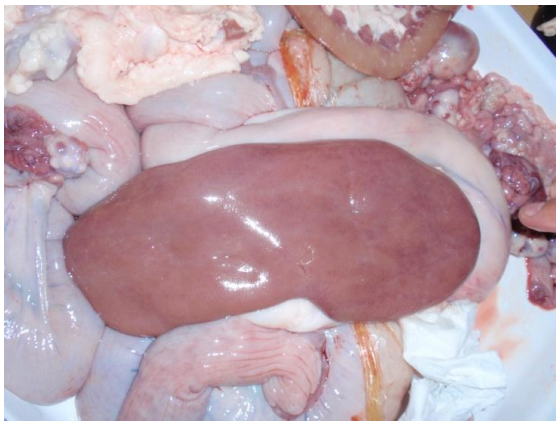

Fig1 (Janjušewvić.org)

Fig2 (Janjušević,org)

Fig3 (Janjušević.org)

And the hyaline accumulates in free space Bowman's capsules and glomeruli atrophy. Discovered in dilatation of the distal tubules. Pathomorphological changes in acute ochratoxicosis pigs they are heavier with a pale and swollen kidneys. (Srebočan et all., 2009).

Fig. 4 (Janjušević.org)

Ohratokisn is nephrotoxic and hepatotoxin, has proven its harmful effects on protein synthesis, which results in the reduction of body weight gain. This means they have a selective effect on the renal parenchyma, disrupt oxidoreduction processes in cells of renal tubules inhibit fermentation thereby blocking the biochemical processes in cells. All this leads to difficulties in renal function. In ochratoxicosis dominated by extreme eksikoza, pallor kidney polymorphisms inidivdual reddish spots closer to the lateral edge. Microscopic is observed tubulonephrosis proximal tubules and necrotic changes manifested epithelium desquamation sometimes encountered thickened basement membrane. (Srebočan Šamanc, 2009).

CONCLUSION

Protection of ochratoxin poisoning can be on commercial pig farms implement appropriate control mycotoxicological food.

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