

CAPTURE OF *RHODOCOCCLUS EQUI* BY THE SLAUGHTERS OF PIGS IN THE CZECH REPUBLIC

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Introduction,

Infections, linked to *Mycobacterium avium* complex are usually limited to the lymph nodes in pigs. Especially the sub-maxillary and mesenteric lymph nodes are affected most often (1).

Granulomatous lesions were observed predominantly in the digestive organs and regional lymph nodes in pigs, infected with *Mycobacterium avium* complex (2). It is considered that granulomatous lesions in lymph nodes are typical for infections caused by *Mycobacterium spp.*. However, *Rhodococcus equi* is also frequently isolated from lesions in sub-maxillary lymph nodes of pigs with granulomatous lymphadenitis (3).

Materials and Methods

The prevalence of granulomatous lesions in slaughter pigs in the Czech Republic was determined for the period on 11 slaughter houses from January 2005 to December 2006 (in detail with laboratory investigation 3 slaughter houses).

There were monitored year of slaughter, place of slaughter, availability of slaughter protocol, number of pigs classified as capable for processing, number of samples sent to reference laboratory and breed identification number.

Results

In general, there were found lesions classified as tuberculous lesions in year 2005 in 0.88 % of checked carcasses, and in year 2006 in 1.42 % of checked carcasses.

Year	Carcasses checked (pc)	Carcasses with tuberculous lesions (pc)	Carcasses with tuberculous lesions %
2005	38,309	100	0.88
2006	35,915	102	1.42

In detail in three chosen slaughter houses were monitored 5 714 slaughter pigs in year 2005, one hundred of them were classified as capable for processing. To the laboratory to further diagnostic tests were sent 43 samples, herewith with the negative results for tuberculosis (TB) and positive *R. equi*. There were monitored 6597 slaughter pigs in year 2006, one hundred and two were classified as capable for processing. There were sent 10 samples to the laboratory, and all samples were classified as negative for TB and positive for *R. equi*.

Year	Car-casses checked (pc)	Lab. investigations of <i>R. equi</i> (pc)	Lab. investigations of <i>R. equi</i> (%)	Positive to <i>R. equi</i> findings from all checked carcasses %
2005	5 714	43	43.00	0.75
2006	6597	10	9.80	0.15

Discussion

In all cases was not confirmed assumption that granulomatous lesions were caused by *Mycobacterium avium* complex in monitored slaughter houses in years 2005 and 2006. The prevalence of granulomatous lesions in the sub-maxillary and/or mesenteric lymph nodes of Dutch slaughter pigs was determined in 1996 to be 0.5% (4). In the recent Dutch study was *Rhodococcus equi* isolated from 44 out of 98 (44.9%) submaxillary lymph nodes with granulomatous lesions (Komijn et al., 2007). After examination of 1,382 pig lymph nodes was *R. equi* separately isolated in 7.4% pigs and in mixed infections with *Mycobacterium avium* complex was *R. equi* isolated in 2.3 % pigs in the Czech Republic in the period of years from 1996 to 1998 (Dvorská et al., 1999).

Reference

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