

SPECIFICITY OF SKIN TUBERCULIN TEST OF BOVINE ANIMALS

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Summary. We have examined specificity of intradermal skin reactions test to dose dependent PPD (protein purified derivative) and HCSM (heat concentrated synthetic medium) bovine tuberculin and HCSM avian tuberculin injected intradermally by syringe and by automatic tuberculin injector. The thickness of the skin at the injection place was considered.

Tested cattle (n=618) had positive – 3.4 % and inconclusive dermal allergic – 3.6 % reactions to bovine tuberculin. Comparative tuberculin test showed 0.3 % positive and 3.6 % inconclusive reactions. Postmortem examination, histopathology and mycobacteriological examination of pathological material confirmed that all positive dermal allergic reactions to bovine tuberculin were false positive. Specificity of the test to bovine tuberculin was 93.0 %, and specificity of the comparative intradermal test was 96.1 %.

We have found neither dose dependent differences of the skin allergic reaction to bovine PPD and HCSM tuberculin, nor differences of the skin allergic reactions at the place of the bovine HCSM tuberculin injection performed by needle and by automatic tuberculin injector. The skin thickness of the cattle having most positively reacted to bovine tuberculin (62.5 % positively reacted to bovine tuberculin cattle) was 4 mm.

Keywords: cattle, skin tuberculin test, specificity.