

**[P-35]**

**The Effect of Polyclonal Antibody on Intracellular Calcium Increase Induced by Mycoplasma Hyopneumoniae in Porcine Tracheal Cells**

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An investigation was undertaken to assess whether polyclonal convalescent and hyperimmune sera obtained pigs inhibit Mycoplasma hyopneumoniae induced increases in intracellular calcium in ciliated porcine tracheal cells. Basal intracellular calcium in the tracheal cells was  $97 \pm 13$  nM ( $n = 22$  cells in four experiments). After exposure to *M. hyopneumoniae* ( $300 \mu\text{g/ml}$ ), intracellular calcium increased by  $246 \pm 56$  nM within 100 sec. For cells pretreated with hyperimmune or convalescent serum, *M. hyopneumoniae* increased intracellular calcium by  $196 \pm 43$  nM and  $223 \pm 65$  nM, respectively. It was found that hyperimmune serum did not significantly prevent the increase of intracellular calcium nor did convalescent serum compared with *M. hyopneumoniae* alone. It was concluded that polyclonal antibodies produced by mycoplasma vaccination or exposure to the pathogen do not prevent *M. hyopneumoniae* induced increases in intracellular calcium.

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