INOS Relationship to Infectious Abortion.

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Measurement of fetal ocular nitrates is a component of the routine diagnostic investigation of food animal abortions. Fetal nitrate concentrations of greater than 40 ppm are considered indicative of nitrate intoxication, however many infectious abortions also have elevated nitrates. Elevated nitrates occurring in body fluids of septic patients are known to be due to expression of the high-output, inducible isoform of Nitric Oxide Synthase (iNOS). This study was designed to determine whether or not there is an association between elevated nitrates and iNOS expression in bovine fetal tissues. Cases were selected using the criteria of nitrate level, cause of the infectious abortion, degree of tissue autolysis, and tissue type. Expression of iNOS was detected using immunohistochemistry in archived paraffin-embedded tissues from bovine abortion cases investigated at the CSU Veterinary Diagnostic Laboratory. This study was not able to demonstrate a relationship between elevated nitrates due to infectious abortions and upregulated iNOS expression.