THE OCCURRENCE OF PRE-ANALYTICAL ERRORS IN DIAGNOSING OF PARASITE INFECTIONS IN DOGS AND CATS IN POLAND

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Summary. In veterinary practice, laboratory errors can be divided into three groups: pre-analytical, analytical and post-analytical errors. Pre-analytical errors can be subdivided into the errors occurring due to biological and non-biological factors. The aim of this study was to determine the types and the rate of occurrence for pre-analytical errors made by veterinarians in parasitological examinations of dogs and cats. The study was conducted in a private veterinary laboratory in Warsaw in the period Aug 2006 - Jul 2010. In total 7392 faecal samples, 371 skin scrapings and 43 parasite specimens or implied parasites for identification were collected. The results of the provided samples were archived with a note on the findings of pre-analytical errors or lack thereof. Overall errors were found in 6979 (89.4%) cover letters and 4459 (57.1%) samples out of 7806 delivered for examination. Pre-analytical errors detected in this study that were resulted from biological factors were not as prevalent as errors resulted from non-biological factors. The former errors resulted from ignorance of parasite biology. The latter group of errors indicates rather negligence, bad habit or lack of experience of veterinarians than ignorance.

Keywords: small animals, laboratory errors, laboratory practice, parasitological diagnostics, pre-analytical errors, veterinary parasitology.