Introduction

Iohexol (Omnipaque®) is a non-radioactive, water-soluble, iodinated radiographic contrast medium, commonly used in medical imaging. This well-known X-ray contrast medium is widely used worldwide, considered as an economical, easily available and safe.

This contrast agent is frequently used as a marker for glomerular filtration rate in both humans and animals such as dogs and cats. More recently, it has also been used to test intestinal permeability in humans, dogs, horses and rats.

Aim of study

To determine whether the FIT-GFR Iohexol Kit (ELISA) may be used for the measurement of iohexol in equine plasma, and to compare such results with the high-performance liquid chromatography (HPLC), which is regarded as the gold standard for measuring iohexol.

Materials and Methods

Blank and iohexol-containing plasma samples (n=100) from healthy horses were collected from the left jugular vein in vacuumed clot tubes before and after nasogastric tube application of 1.0 mL iohexol/kg as a 10 % solution.

Results

Results from this study showed that the correlation coefficients when comparing ELISA vs. HPLC (r=0.92) was all excellent.

CONCLUSIONS

✓ Results from our study demonstrate that measurement of iohexol from equine plasma using the ELISA Kit is as accurate and reproducible as using HPLC.

✓ Furthermore, it was concluded that using ELISA Kit instead of HPLC for measuring iohexol is more beneficial for practical and cost-effective reasons.

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References


