

Pyelography by Intraosseous Injection of Iodixanol in Persian Squirrel

Authors : Mehdi Tavana, Seyedeh Zeinab Peighambarzadeh

Abstract : Pyelography is used for morphologic and especially functional studies of the urinary tracts. There are many indications for excretory Pyelography in humans and animals. Intravenous Pyelography is the most practical method; other Pyelography techniques were manipulated because of difficulties for finding veins in small size of the patients. At the best of times, the combination of small veins and abundant subcutaneous tissue makes vascular access difficult or impossible, therefore, another methods of administration of contrast media is desired. This study was performed to evaluate the feasibility of intraosseous injection of iodixanol in providing a safe and diagnostic urogram in Persian squirrel. Fourteen hundred mg iodine per kilogram body weight of iodixanol was injected subcutaneously over tibial tuberosity on ten clinically healthy adult Persian squirrels with no signs of urinary system disorder. Lateral and ventrodorsal radiographs were taken every 2 minutes until the pyelogram was finished. Intraosseous injection of iodixanol was successful to show nephrogram, pyelogram, uretrogram and cystogram clearly. There were no abnormal clinical signs after one week of experiments. Biochemical and hematological profiles were in normal ranges. It is concluded that intraosseous Pyelography is an effective and reliable method for Pyelography studies in squirrel. Microscopic examinations of the kidneys and the site of injection after one week were normal.

Keywords : pyelography, intraosseous injection, iodixanol, persian squirrel

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