

Higher Doses of Iohexol during the IVP do not Influence the Levels of Blood Serum Cation Electrolytes

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AIM

The influence of the nonionic contrast agent iohexol on blood pH and the cation cardioactive electrolytes Ca, Na, K and Mg was studied in vivo in humans during the intravenous pyelography (IVP).

MATERIALS AND METHODS

A population of 24 patients was divided into two equal groups. The first group of patients (6 males and 6 females; mean age 60.9, range 39-75 years) received intravenously 0.6 mL Omnipaque per kg of body weight (0.388 g iohexol/kg and 0.18 g iodine/kg). The second group of patients (6 males and 6 females; mean age 60.5 years, range 44-74 years) received intravenously the double dose of Omnipaque (1.2 mL Omnipaque/kg; 0.776 g iohexol/kg and 0.36 g iodine/kg).

RESULTS AND DISCUSSION

It was found that iohexol in simple and double doses had not any statistically significant effect either on blood pH or on the above blood serum electrolytes. Blood pressure, both systolic and diastolic, remained also stable in all the patients during the examination.

It is known that C.M exert osmolar, ionic and molecular effects and such effects like serum electrolyte disturbances are more linked with the ionic ones. On the other hand, available references concerning the action of the nonionic C.M on blood serum electrolytes are very few in number and those ones that exist are related with animals. This time, it was proved in humans that a nonionic agent like iohexol in simple and double doses as compared to those that are used in routine IVP have not any effect on blood serum electrolyte balance.