[Gadodiamide and carbon dioxide as alternative contrast media in patients with chronic renal failure]

[Article in Spanish]

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Twelve diagnostic and therapeutic angiograms were performed in 10 patients with chronic renal failure using gadodiamide and CO2 as vascular contrast. Renal function was evaluated with serum creatinine levels 24 hours before an 24 to 48 hours after the vascular procedure. Imaging quality and tolerance of these contrast agents were also studied. There was no significant increase in serum creatinine levels in the 12 procedures. In all cases but one, the combined use of gadodiamide and CO2 offered images of enough quality and definition for diagnosis and therapy. A good symptomatic tolerance was present in all procedures. Gadodiamide and CO2 seem to represent useful and safe contrast agents for angiography and endovascular intervention in patients with chronic renal failure. Further experience is needed to confirm these initial findings.

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Peripheral Vascular Disease

CO₂ angiography

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Abstract
Iodinated contrast agents are routinely used in procedures to diagnose and treat peripheral vascular disease. Despite the development of low-osmolar contrast agents and premedication techniques, these agents are still associated with contrast-induced nephropathy and allergic reactions in some individuals. To overcome these problems, carbon dioxide angiography has been developed as an alternative to standard iodinated contrast angiography in certain patient populations. The technology of digital subtraction angiography has greatly improved the image quality of CO₂ angiography. Understanding the unique properties of CO₂, the techniques for its use, and its associated limitations and complications will allow interventional cardiologists to expand their treatments of athereosclerotic peripheral vascular disease. Cathet Cardiovasc Intervent 2002;55:398-403. © 2002 Wiley-Liss, Inc.

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