Acute Treatment after Accidental Intrathecal Injection of Hypertonic Contrast Media

To the Editor—Acute neurotoxicity of hypertonic solutions of contrast media is well established in experimental studies and in humans. However, until now, no treatment has been proposed. We describe a treatment used in one case of accidental intrathecal injection of hypertonic solution of meglumine amidotrizoate (Angiografin®).

A 69-year-old, 80-kg man with an history of inferior myocardial infarction and colon carcinoma with pulmonary and painful coccygeal metastases was scheduled for insertion of a thoracic intrathecal catheter with an implantable pump for intrathecal opioid administration. In order to verify the position of the catheter in the subarachnoid space, 10 ml of hypertonic solution of contrast media was accidentally injected through the reservoir of the implantable device (fig. 1). Concomitantly, signs of neurotoxicity, including spastic paraparesis, cutaneous hyperesthesia, spontaneous pain of the lower extremities, and cardiovascular effects including tachycardia 150 bpm and ST segment depression, occurred. The patient was immediately admitted to the intensive care unit where an effort was made to dilute the contrast media by infusion of saline into the subarachnoid space. A second catheter was inserted into the lumbar subarachnoid space via the L4-L5 interspace and sterile saline was injected in 10 ml aliquots up to a total of 180 ml. After each injection of 10 ml of sterile saline 10 ml of cerebrospinal fluid were withdrawn through the lowest catheter. Cardiovascular and neurological signs soon disappeared and no sequellae were noted 24 h later.

REFERENCES


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