

Unsuccessful tracer injection in radionuclide cisternography revisited

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Since cerebrospinal fluid (CSF) leakage is highlighted as a cause of persistent headache, radionuclide cisternography has been increasingly performed in Japan to confirm the disorder, although the limited ability of the examination should be recognized. We present 3 cases in which failure of a tracer injection was strongly suspected. In 2 cases with chronic symptoms, the tracer appeared to be injected into the epidural space, because of irregular initial accumulation of the tracer and lack of diffusion along the CSF cavity. Another is a case with spontaneous CSF leakage confirmed by MRI, and the tracer was thought to be injected into the leaked fluid accumulated in the spinal epidural space. Tracer in the CSF space rapidly disappeared within several hours in all cases. As such cisternographic images may be misdiagnosed as severe CSF leakage, careful interpretation of images in patients especially with no typical MR findings of CSF leakage is necessary. Excessive tracer clearance from the body suggests such technical failure.

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