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## Dialysis

# Nephrogenic Systemic Fibrosis: A Population Study Examining the Relationship of Disease Development to Gadolinium Exposure

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Nephrogenic systemic fibrosis (NSF) is a devastating complication of severe renal failure. Recent reports suggest that exposure to gadolinium-containing contrast agents (GCCA) is associated with the occurrence of NSF. The population of patients with ESRD in and around Bridgeport, CT, was studied during an 18-mo period. The incidence of NSF was 4.3 cases per 1000 patient-years. Each radiologic study using gadolinium presented a 2.4% risk for NSF. The association between gadolinium exposure and NSF was highly significant ( $P \leq 0.001$ ). It is concluded that GCCA exposure is a major risk factor for NSF in the ESRD population. Because of the significant morbidity and mortality with NSF, it is believed that gadolinium exposure should be avoided in patients with ESRD. In the event that exposure cannot be avoided, careful consideration of the potential consequences, including a thorough discussion of the risks and benefits of GCCA, is advised.

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