Twelve Year Experience with Lead Extractions in a Referral Center

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Over the last 12 years we have been a referral center for lead extraction.

We sought to review our experience, and to compare the results of our intitial experience with later experience.

Methods: Retrospective analysis of a prospectively collected database of all 152 cases of lead extractions performed by 2 operators since 1996.

Results: Since 1996 we extracted 258 leads in 152 patients, 101 of whom (66%) were referred from 20 other hospitals. Indications were: pocket infection or erosion in 50(32.9%) systemic infection in 57(37.5%) redundant nonfunctioning leads 26(17.1%) venous occlusion 5(3.3%) and others 14(9.2%). Leads extracted included 81 atrial 95 ventricular pacing 65 ICD 13 LV and 4 others. Mean implant duration was 5.05y. Tools used included locking stylets 179(69%), dilator sheaths 147(60%), electrodissection sheaths 45(17.4%) and femoral tools in 35(13.6%).

For analysis of results cases were divided into initial group of 50 earliest cases and later group of the following 100 cases. In the early group extraction resulted in complete success, partial success and failure in 59(81.9%), 3(4.1%) and 8(11.1%) respectively. In the later group corresponding numbers were 179(96.2%), 3(1.6%) and 2(1.1%) respectively. The difference in favor of the later group was significant (P<0.05).

Complications occurred in 2(3.8%) and in 2(2%) in the early and late group respectively. There was one procedure related death in the early group.

Conclusions: Extractions are complex procedures that necessitate a wide range of tools and significant experience for success. Performance improves significantly after the first 50 cases