New Pacemaker – Defibrillator Lead Extraction Tool. Improved Results and Facilitation of Procedure

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Background: Percutaneous lead extraction is in certain clinical situations mandatory and complicated. This procedure is associated with a small but not negligible percentage of morbidity and mortality.

Aims: We present our experience with complicated lead extraction using the new Lead Locking Device (Spectranetics) lead extraction system (LLDEZ). This new system resembles the old Liberator (Cook Company), the main difference being that this system locks along the entire contacted lead lumen.

Results: Since January 2010 ten patients underwent advanced lead extraction after failing the usual maneuvers of simple lead traction. Using the LLDEZ system we attempted 20 lead extractions, 7 ICD leads and 13 Pacemaker leads. Leads had been implanted for a mean of six years (range 2 – 10 years). Fifteen leads were completely removed, in 4 leads the tip of the electrode was disconnected during retrieval and left in place, while in the remaining lead the procedure was abandoned due to profuse bleeding and the lead was cut and left in place. Telescopic instrumentation was used during the extraction of 4 leads.

Conclusion: The LLDEZ Extraction System seems to add further benefit to the complicated and risky procedure of electronic devices' lead extraction.