National Heart Institute experience in transvenous lead extraction by Application of a medial incision approach

Samhaa Alsayed Hamed⁽¹⁾, Azza Katta⁽²⁾, Mohamed Ossama⁽³⁾

- 1) Consultant of electrophysiology at the electrophysiology department
- 2) Professor of electrophysiology and Head of the Electrophysiology department
- *3) Professor of electrophysiology and extraction program creator and director*

Background:

In NHI transvenous lead extraction procedure is done according to the heart team lead extraction program where dedicated electrophysiologists always do the procedure according to our limited resources and finances. Managing each case as an entity begins with simple transvenous traction. application of medial incision approach at the venous entry to overcome adhesions, uncoil loops, and set free the lead at its venous entry facilitating TLE. This approach was introduced by Professor Dr. Mohamed. Ossama lead extraction group creator and director at NHI.

Aim and objectives:

To evaluate the use of the medial incision approach in TLE.

Methods:

We analyzed 23 patients who underwent lead extraction at the National Heart Institute since the first of January 2022 till the end of August 2023 in an observational retrospective study. all of them were studied regarding success as well as complications and compared our results to previously reported outcome rates.

Result:

A total of 23 patients. they underwent lead extractions from January 2022 to August 2023. Complete radiological success was seen in 22 patients i.e., 98.3% only Procedure-related minor complication occurred in 3 patients i.e., 8.9%. successful complete removal occurred in 22 patients i.e. 96.4% Death within 30 days did not occur with a procedure-related mortality of 0%.

Conclusion:

The application of the medial incision approach in TLE. Is considered helpful, safe, and effective.

Keywords:

NHI, TLE, Heart team extraction program, medial incision approach.