



Ottava Giornata della Ricerca della Svizzera Italiana

Venerdì 9 marzo 2018

Modulo per la sottomissione abstract di ricerca CLINICA

Titolo (massimo **15 parole**)

New onset of phrenic nerve palsy after laser-assisted transvenous lead extraction: a single-centre experience

Autori (cognome e iniziali, es: Grassi L.)

Özkartal T, Regoli F, Conte G, Caputo ML, Klersy C, Moccetti T, Auricchio A

Affiliazioni (ospedale o istituto, servizio o reparto, indirizzo, es: Ospedale Regionale di Lugano, Servizio di angiologia, Lugano)

Cardiocentro Ticino
Via Tesserete 48
6900 Lugano
Svizzera

Testo (massimo **250 parole**, preferibilmente in italiano (accettato anche in inglese), suddiviso in Introduzione, **Metodi**, **Risultati**, **Conclusioni** e **Finanziamento**)

Aims: Phrenic nerve palsy (PNP) after mechanical transvenous lead-extraction (TLE) was recently described for the first time. We aimed to analyse our TLE database for the presence of PNP.

Methods: All consecutive patients referred to our institution were included in this study. Every available post-procedural chest x-ray was compared to the routinely performed pre-procedural radiographs. A newly elevated hemidiaphragm ipsilateral to TLE was considered indicative of PNP.

Results: Altogether 255 TLE procedures with extraction of 364 leads were performed. Most common TLE-indication was lead malfunction (63%). Complete radiographic success rate was 97.3% with an In-hospital procedure-related major-complication rate of 2.4%, including one intra-procedural death (0.4%). We identified 5 cases with PNP (2%), all occurring after laser-assisted TLE. Clinical presentation varied from subtle and aspecific chest pain/discomfort to severe and acute dyspnoea, with time to diagnosis varying from immediate to several weeks after the procedure. In 80% of cases, the explanted lead was a defibrillator electrode and the median lead dwelling-time was 70.2 months (29.3; 184.9). In 4 cases the extraction was performed using high-energy laser (pulse-repetition-rate 80 Hz).

Conclusion: The present study reports the incidence of PNP after laser-assisted TLE. We postulate that the thermal energy generated by laser is not dissipated quickly enough in occluded or heavily calcified lesions, injuring the ipsilateral phrenic nerve. Our findings advise to carefully consider to increase pulse-repetition-rate at the subclavian level. Larger, possibly prospective studies are needed to evaluate the real incidence through systematic radiological assessment after TLE.

Visto superiore (prego indicare Nome e Cognome del superiore)

Angelo Auricchio

Criteria per sottomissione Abstract:
NO Case report
NO Abstract senza nessun risultato
VISTO da un superiore



Invio Abstract