



CAROTID ENDARTERECTOMY SURGERY WITH DEEP CERVICAL PLEXUS BLOCK. OUR EXPERIENCE WITH 800 CASES.

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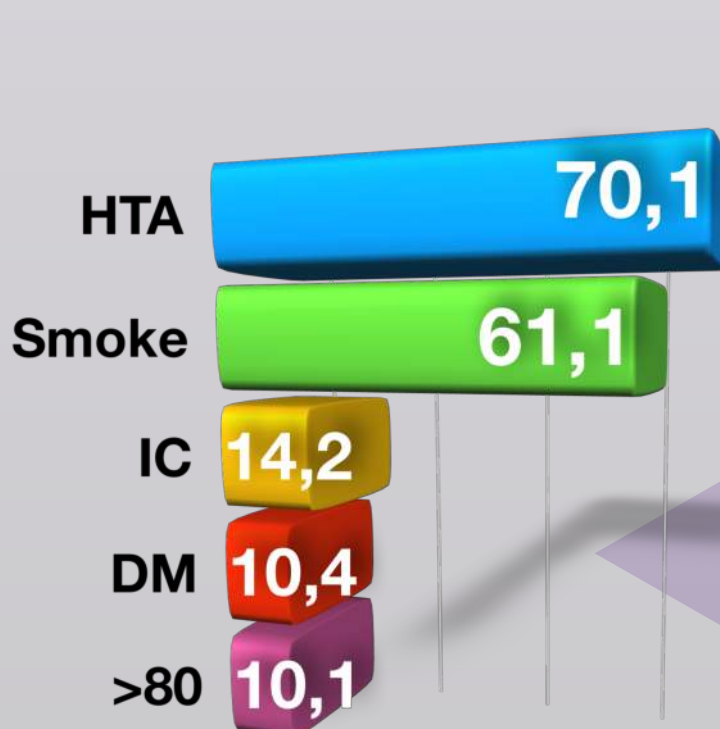
BACKGROUND AND GOAL OF STUDY

Carotid endarterectomy (CED) surgery under regional anesthesia offers a series of advantages over general anesthesia, such as **observing neurological symptoms owed to cerebral perfusion deficit**, avoiding less specific cerebral monitoring or reducing the use of intraluminal derivation (ILD). In addition, it could bring off more hemodynamic stability and less need of vasoactive drugs.

The goal of our study is **to describe the efficacy and security of deep cervical plexus block (DCPB) in the CED**. Furthermore, to analyze the incidence of neurological (NC) and cardiac complications (CC), as well as the reconversion to general anesthesia's rate (GAR).

MATERIALS AND METHODS

A descriptive analysis was conducted among a series of 797 patients (652 men and 245 women), that were operated from CED between 1994 and 2016. DCPB, always **executed by the same physician**, was reinforced with superficial block. It was also used a **sedation** with Midazolam and Remifentanil, With **clinical monitoring**, intraoperative events while carotid clamping were observed. Furthermore, early postoperative complications were taken into account. We analyzed preoperative morbidity, GAR's rate, CPB complications, NC, CC and mortality.



MORBILITY

RESULTS AND DISCUSSION

The necessity of ILD was 9.2% (due to neurological symptoms during the clamping). Only in **0.75%** of CED with DCPB some complications were observed: **0.25% for respiratory insufficiency** (2 patients), **0.5% for toxicity of local anesthetic** (4 patients).

Only 1.6% patients reconverted to GAR (0.6% for pain, 0.8% for neurological symptoms in spite of ILD, 0.3% for respiratory insufficiency). In fact, only 0.87% of them were caused of anesthesia complications. **In the last 10 years, this GAR rate has decreased to 0.3% from which only 0.12% were for anesthesia reasons.**

During postoperative recovery, **NC were observed in 4.4% cases and CC in 4.4%**. Mortality rate was **1.1%**.

CONCLUSIONS

In our experience with nearly 800 cases, **we could confirm that the deep cervical plexus block, among with sedation, for CED surgery is an effective and secure technique. The rates in our series for complications, due to the anesthesia technique, and RAG conversion are very low.** Constant clinical evaluation during the procedure benefits from observing any neurological symptoms secondary to cerebral perfusion deficit. In addition, ILD could be carried out in selected patients. Nevertheless, the morbimortality is similar than other bigger case series.

