Serratus plane block anesthesia for breast surgery and local anesthetic toxicity: a case report

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INTRODUCTION

We describe a case of local anesthetic toxicity (LAST) due to a fascial plane block intended as anesthetic technique for breast surgery in a patient with cardiac morbidity.

CASE DESCRIPTION

Female, 41YO, scheduled to bilateral extraction of breast prosthesis due to spontaneous rupture.

- Comorbidities
 - 1. Left humerus osteosarcoma with distal arm amputation and multiple reconstructive surgeries involving scapular girdle and pectoral ipsilateral areas.
 - 2. Dilated cardiomyopathy due to chemotherapy and pregnancy, associated with severe mitral insufficiency and moderate pulmonary hypertension.

1) BRILMA

Pectoral
mobilization
and
capsulotomy

2) PEC-1

ANESTHETIC PLAN

REGIONAL BLOCK AND SEDATION

- 1) BRILMA:
 - 10x2 ml L-Bupi 0,375%
 - 10x2 ml Mepi 1%
- 2) PEC-1: 8x 2 ml Mepi 1%

15 minutes Later...

- Incoherent language, dysarthria, involuntary movements ➡ Neurotoxicity ✓ Cardiac toxicity ✗
- We suspected LAST so we began treatment with intravenous lipid emulsion and supportive measures (intubation and mechanical ventilation) + Continuous cardiac and respiratory monitorization in ICU.
- Neurological organic causes were ruled out and TTE showed no new findings. Posterior evolution were satisfactory.

CONCLUSIONS

- The application of thoracic wall blocks for breast surgery has been expanded. However more studies should be made in order to establish the risk/benefit of doing a regional or a general anesthesia.
- It should be our priority to establish LAST risk factors systematically (maximum AL dose or anatomical deformity), moreover in those cases where anesthetic plan is regional.
- Where regional anesthesia is planned, we strongly recommend that more clinical trials should be made to compare the benefits and side effects of those type of blocks versus the paravertebral block, considered the gold standard.

Bibliography

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