ΜΕΓΑΛΗ ΑΝΑΙΣΘΗΣΙΟΛΟΓΙΚΗ ΕΠΙΣΚΕΨΗ (1)

CESAREAN SECTION IN A PATIENT WITH PERIPARTUM CARDIOMYOPATHY: SHOULD MONITORING DICTATE THE CHOICE OF ANESTHETIC?

Νικόλαος ΜΠΑΛΑΜΟΥΤΣΟΣ, Νικόλαος ΣΚΟΥΜΠΑΣ

Learning objectives:

1. Peripartum cardiomyopathy: definition, incidence and associated factors, presenting symptomatology, diagnosis and treatment.
2. Pregnancy-induced cardiovascular changes.
3. Choice of anesthetic for cesarean section.
4. Invasive hemodynamic monitoring: CVP and / or PAC and / or TEE. Indications, contraindications and complications of monitoring modalities.
5. Postpartum treatment of a peripartum cardiomyopathy mother.

Stem case – Key questions

A 24 year old G4P3, 31 weeks pregnant female, was admitted for worsening heart failure. Five months after the birth of her last child (two years ago), she was diagnosed with post-partum cardiomyopathy (PPCM). Her past medical history was also significant for mild asthma. Her current medication included furosemide and aspirin. Apart from a brief admission for medication adjustment, she continued to work.

At the time of admission her ECG showed complete LBBB. The vital signs were: BP 116/50 mmHg, heart rate 110 bpm (sinus rhythm), SpO_2 97% in room air. She had 1+ pitting edema, and her extremities were warm. The patient complained of worsening shortness of breath and had 3 pillow orthopnea. A trans-thoracic echocardiograph (TTE) showed a dilated left ventricle (LV), with LV end-diastolic diameter of 7.9 cm, LV ejection fraction (EF) of approximately 13%, global severe hypokinesis, 4+ mitral regurgitation (MR), and preserved right heart function. Her heart function deteriorated further, four weeks later (35 weeks gestation). Her medical regimen included heparin SQ, furosemide 40 mg i.v. qD, metoprolol 12.5 mg PO q12h, magnesium oxide 400 mg PO TID, and albuterol. Repeat TTE demonstrated further dilation of LV (LV end-diastolic diameter 8.4 cm), with an EF of 11%, 4+ MR, and preserved right heart function. All her previous deliveries were with cesarean section. She was scheduled for an elective cesarean section.

1. Peripartum cardiomyopathy:
    a. Definition
    b. Presentation
    c. Prognosis?
2. How will the changes of late pregnancy affect a patient with cardiomyopathy?
3. What are the treatment options for a parturient with peripartum cardiomyopathy?
4. How is pregnancy managed in a parturient with cardiomyopathy?
5. Which particular hemodynamic parameters would you monitor in this patient and why?

The pre-anesthetic evaluation revealed a Malampati class III airway, free range of motion and normal thyromental distance in an orthopneic (3 pillows) patient. Chest auscultation revealed normal lung sounds, and a loud holosystolic murmur over the cardiac apex. The vital signs were: BP 85/65 mmHg, HR 100 bpm, SpO_2 94% on room air. The patient had a history of three previous cesarean sections. The obstetrician planned to perform a repeat cesarean section. The cardiologist recommended (as per chart record) that the patient receive a spinal anesthetic and placement of an arterial line and a pulmonary artery catheter pre-induction.

6. Design an anesthetic tailored to this patient's hemodynamic presentation
7. What are the hemodynamic goals? Which monitors will you utilize peripartum?
8. How are you going to interpret the pertinent information?

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ΜΕΓΑΛΗ ΑΝΑΙΣΘΗΣΙΟΛΟΓΙΚΗ ΕΠΙΣΚΕΨΗ (2)

Ι) ΑΠΟ ΤΗΝ ΠΝΕΥΜΟΝΙΑ ΣΤΟ MOFS ΜΕΣΩ ΧΕΙΡΟΥΡΓΕΙΟΥ …

Εισηγητής: Χαρίσιος ΣΚΟΥΡΤΗΣ
Ειδικοί συζητητές: Βασίλης ΓΡΟΣΟΜΑΝΙΔΗΣ, Βίκη ΜΕΤΑΞΑ

Ασθενής, 38 ετών, διακομίζεται από νοσοκομείο της περιφέρειας με διάγνωση πνευμονίας και εισάγεται στη μια παθολογική κλινική πανεπιστημιακού νοσοκομείου για περαιτέρω θεραπεία.

[Η ασθενής είχε γεννήσει με καισαρική τομή το τρίτο της παιδί προ τεσσάρων περίπου μηνών και έκτοτε είχε κοιλιακά διάχυτα άλγη, τα οποία έγιναν μόνιμα προ εβδομάδος με αποτέλεσμα την εισαγωγή της σε παθολογική κλινική νοσοκομείου της περιφέρειας. Την τέταρτη ημέρα διαγνώσθηκε οξεία κοιλία αλλά ο αναισθησιολόγος έκρινε ότι, λόγω λοίμωξης του αναπνευστικού, έπρεπε η ασθενής μετεγχειρητικά να εισαχθεί στη ΜΕΘ. Ως εκ τούτου συνέστησε την διακομιδή της σε τριτοβάθμιο νοσοκομείο ...]

ΙΙ) ΤΟ ΣΟΤΥ ΩΣ ΑΛΛΟΘΙ ΚΟΙΝΩΝΙΚΗΣ ΠΟΛΙΤΙΚΗΣ Η ΦΤΑΙΕΙ Η ΙΑΤΡΙΚΗ ΕΚΠΑΙΔΕΥΣΗ …

Εισηγητής: Χαρίσιος ΣΚΟΥΡΤΗΣ
Ειδικοί συζητητές: Βασίλης ΟΥΡΑΗΛΟΓΛΟΥ, Βίκη ΜΕΤΑΞΑ

Ασθενής, 27 ετών, διακομίζεται από νοσοκομείο της περιφέρειας με σοβαρή ΚΕΚ για νευροχειρουργική αντιμετώπιση. Το τρίτο νοσοκομείο οι συγγενείς εκρήγνυται και ζητούν τα «κανάλια»…