ARE ALL THE “BLUES” THE SAME?

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BACKGROUND

Nowadays, dyes are widely used in medical practice. Patent blue (PB) is frequently used subcutaneously as part of the staging procedure in patients with early breast cancer. However, there are a few cases reporting its use intravenously, instead of methylene blue (MB).^{1,2,3} This case demonstrates the repercussions of the administration of PB instead of MB in a distal portal vein branch.

CASE REPORT

Male, 70 y.o., ASA II, admitted for hepatic resection. One hour after the first incision, PB was injected in a distal branch of the portal vein. Immediately after, he presented hypotension (60/40mmHg) and desaturation (SpO2 100% to 95%). Crystalloid boluses were given and a noradrenalin perfusion was started with no satisfactory response. There was no repercussion in the ventilation and ABG was normal. Arterial pressure stabilized around 85/50 mm/Hg. The surgery was over after an hour. When the drapes were removed it was noticed that the patient had a blue skin discoloration. Pulmonary auscultation was normal, he was extubated and transported to the ICU. After 8 hours, the patient was stable and noradrenaline was suspended; 48 hours later, the discoloration of the skin disappeared. Posteriorly, we concluded that the dye that should have been used was MB, but instead, PB was given.

DISCUSSION

Even though dyes are frequently used, it's important to notice that they have different indications, contraindications and administration methods. It's mandatory that all of the staff is aware of these differences. Certain drugs seem to belong to no specialty in particular, which may contribute to a less rigorous check between all the parts involved. Avoidance of vague terms such as "blue" is crucial to avoid errors. It would be important to educate the staff about the differences of these agents, and also to create a protocol to avoid errors like this.

CONCLUSION

Knowledge of all agents given to the patient is extremely important, even if it's not an “anesthesiologist's drug”. Also, communication between the staff including the pharmacy is key for the wellbeing of the patient.

References:

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