



Letter to the article by Hassabelnaby et al

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To the Editor:

We read with great interest the recent article by Hassabelnaby et al. [1]. Their inspirational study on this important topic deserves further discussion. In particular, we have some concerns in regards to their study conclusion. The authors have claimed that epinephrine was associated with a higher incidence of maternal tachycardia and a likely lower incidence of maternal hypotension than phenylephrine for pregnant women who underwent elective cesarean delivery. However, it was not clear about the level of block height of patients after spinal anesthesia in both groups.

It is known that the sensory level achieved after spinal anesthesia is important for pregnant women who are undergoing elective cesarean delivery [2, 3]. Failure to reach the fifth thoracic dermatome (T5) increases discomfort [3]. To obtain adequate and satisfactory anesthesia for cesarean delivery, an intense blockade covering from the sacral (S2–S4) to the visceral fibers (T4–T12) is needed [4]. A blockade with such extension results in hypotension by blocking the sympathetic fibers. So, the incidence of hypotension during spinal anesthesia for cesarean delivery is reported to be as high as 80% [5]. In the article by Hassabelnaby et al. [1], spinal block was assessed using a pinprick, and block success was confirmed if the sensory blockade was at the level of T4. If the level of block height of patients after spinal anesthesia were too high (> T2), the incidence of hypotension would increase, which would inhibit cardiac

function, leading to decreased cardiac output [4, 5]. However, an important question is raised: what were the percentages of patients with Th4 in both groups? On the other hand, whether there was a significant difference in the sensory level achieved after spinal anesthesia between the two groups has not been reported yet.

Therefore, under such a level of block height setting, the changes in maternal hemodynamics might not be accurate. From the discussion above, the current study by Hassabelnaby et al. did not provide convincing evidence that epinephrine was associated with a higher incidence of maternal tachycardia and a likely lower incidence of maternal hypotension than phenylephrine.

References

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