

dural space. I speculate that the lack of analgesia may be attributed to the dilution of local anesthetic with the prior injected saline. In other words, greater volume of saline may decrease the anesthetic effect in spite of increasing the spread of anesthesia. Further study concerning a relation among injection volume of saline, spread of anesthesia, and anesthetic effect will be needed.

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Max Kappis and the Celiac Plexus Block

To the Editor:—In the literature, including a recent article by Ina *et al.*,¹⁻⁴ Max Kappis has repeatedly been described as the one who developed the technique of transcutaneous celiac plexus block. This is incorrect, although we do think that he has earned a place in the history of anesthesia as the developer of the transcutaneous splanchnic nerve block. In studies using dogs, he was able to show that pain from the upper abdominal organs is conducted through the splanchnic nerves, and that the upper abdomen could be operated on after previous infiltration with procaine to the splanchnic nerves from the back. His intention was so clearly illustrated in the accompanying figure.⁵ This is a very clear illustration of his block. It shows that he had the same image when he performed the block as we are able to do with computed tomographic scan guidance now. Therefore, this was not the celiac plexus block but splanchnic nerve block.⁶ In addition, he never used the word celiac (solar) plexus block in any of his publications. His technique was, therefore, relatively safe, despite the absence of x-ray or computed tomography control, as compared with actual celiac plexus block, which requires penetration of the diaphragmatic crus. We think this was one reason why his technique gained popularity for upper abdominal surgery at that time.⁷

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