Effects of indigo carmine intravenous injection on noninvasive and continuous total hemoglobin measurement.

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The effects of an intravenous injection of indigo carmine on noninvasive and continuous total hemoglobin (SpHb) measurement were retrospectively evaluated. The subjects were 21 patients who underwent elective gynecologic surgery under general anesthesia. During surgery, 5 mL of 0.4 % indigo carmine was intravenously injected, and subsequent changes in SpHb concentrations were evaluated. The results demonstrate that the pre-injection SpHb level was 10 g/dL, and the minimum post-injection SpHb level was 8.3 g/dL. The amount of decrease was 1.8 g/dL. The time to reach the minimum value was 4 min, and the time to return to the pre-injection value was 15 min. The decrease in SpHb was greater in the group with a perfusion index (PI) < 1.4 than in the group with a PI > 1.4. The assessment of SpHb after an intravenous injection of indigo carmine necessitates caution.