A Mesocolonic Hematoma Accompanied by Renal Injury

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A 49-year-old man was transferred to the emergency department after a motorcycle accident. The initial CT showed left renal injury and adjacent a large hematoma. Inferior mesenteric arteriogram showed contrast extravasation from descending branch of left colic artery. A laparotomy was performed a large left mesocolonic injury was identified. A mesocolonic injury can be misdiagnosed to retroperitoneal hematoma originated from kidney.

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Key Words: Mesentery, Hemorrhage, Hematoma, Kidney

CASE

A 49-year-old man was transferred to the emergency department after being involved in a motorcycle accident. The patient complained of left flank pain. The patient showed stable vital signs and alert mentation initially. Abdominal computed tomography (CT) showed organ-injury-scale grade III left renal injury and an adjacent large hematoma (Fig. 1.). An angiogram via the femoral artery was performed for further evaluation and hemostasis. The left renal arteriogram did not show any extravasation from the left kidney. An inferior mesenteric arteriogram showed contrast extravasation from the descending branch of the left colic artery (Fig. 2.). Angioembolization was tried but failed because of arterial spasm and dissection. Extravasation from the aberrant renal artery from the infrarenal aorta was identified and successfully ceased after embolization. Conservative management was performed initially

because the extravasation from the branch of the left colic artery was intermittent and not significant. However, during conservative management, an exploratory laparotomy was decided because of persistent acidosis and hypotension 12 hours after admission. A large left mesocolonic hematoma and mesocolonic tearing was noted. An anterior resection was performed. The left kidney was not explored. After the operation, the patient was uneventfully discharged 20 days after admission. However, a left nephrectomy was performed because of persistent hydronephrosis during the follow-up period 4 months after the accident.

DISCUSSION

A mesocolonic hematoma can be misdiagnosed as a retroperitoneal hematoma originating from a retroperitoneal organ including the kidney. Hemodynamic instability is the single most important factor for the indica-

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Fig. 1. Abdominal computed tomography shows organ-injury-scale grade III left renal injury and adjacent large hematoma.

Fig. 2. Inferior mesenteric arteriogram shows contrast extravasation from the descending branch of the left colic artery

tion of surgical treatment of renal injury (1). Conservative management accompanied by vascular intervention is effective in even high-grade renal injury (1). Contrarily, an angioembolization is usually less effective for bleeding

from the intestinal mesentery because of the abundant collateral blood supply. An angioembolization for the intestinal mesentery can cause delayed ischemia followed by stenosis/perforation (2).

In conclusion, when a hematoma is related to renal injury, the hematoma may not be solely from the kidney, and the possibility of mesocolonic injury should be considered. If a mesocolonic injury is suspected, an exploratory laparotomy could be considered as a diagnostic and therapeutic option.

CONFLICT OF INTEREST

No potential conflict of interest relevant to this article was reported.

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