

# Spontaneous rupture of the iliac vein

Yuji Yasuga, MD;\* Noriyuki Hayashi, MD;\* Yoshiyuki Nagai, MD;\* Yoshikado Sasako, MD†

A previously healthy 79-year-old woman was admitted to our emergency room in December 2002 with a 90-minute history of lower-abdominal pain, which had a sudden onset without trauma. Shortly thereafter, she collapsed in the emergency room. A computed tomographic image of her abdomen revealed a huge retroperitoneal hematoma extending to the left kidney (Fig. 1), with leakage of contrast medium in the hematoma in the left flank (Fig. 2). The left common iliac vein was dilated with a thrombus (Fig. 3), but the origin of the bleeding was not apparent.

An emergent laparotomy was performed on suspicion of rupture of the iliac arterial aneurysm. Surgery revealed a

massive retroperitoneal hemorrhage, but arteries in the retroperitoneal space were intact. A 3-cm longitudinal tear in the left external iliac vein with a fresh intravenous thrombus was detected as the source of the bleeding. The vein showed no macroscopic abnormality. The tear was sutured and the bleeding stopped. No other bleeding source was noted during exploration of the entire abdomen. She was discharged home after an uneventful course of recovery.

Spontaneous rupture of the iliac vein is very rare; only about 20 cases of this disease have been reported in the literature.<sup>1-3</sup> Most cases of this disorder were complicated by deep-vein thrombosis. Local venous hypertension from deep ve-

nous thrombosis and venous wall weakness secondary to thrombophlebitis are considered to have etiologic importance in this disease.<sup>1-3</sup>

**Competing interests:** None declared.

## References

1. DePass IE. Spontaneous common iliac vein rupture: a case report. *Can J Surg* 1998;41:473-5.
2. Yamada M, Nonaka M, Murai N, Hamada H, Aiba M, Funami M, et al. Spontaneous rupture of the iliac vein: report of a case. *Surg Today* 1995;25:465-7.
3. Plate G, Qvarfordt P. Idiopathic rupture of the iliac vein: case report. *Eur J Surg* 1995;161:611-2.



FIG. 1. Abdominal computed tomographic scan revealing a large retroperitoneal hematoma extending to the left kidney.



FIG. 2. CT image displaying leakage of contrast medium in the hematoma in the patient's left flank.



FIG. 3. CT scan showing dilatation of the left common iliac vein with a thrombus.

Divisions of \*Cardiology and †Cardiovascular Surgery, Heart Institute, Rinku General Medical Center, Izumisano, Osaka, Japan

Accepted for publication Feb. 20, 2004

**Correspondence to:** Dr. Yuji Yasuga, Division of Cardiology, Heart Institute, Rinku General Medical Center, 2-23 Riuku Orii Kita, Izumisano, Osaka 598-8577 Japan; fax 81-724 69-7929; azuyysg@ybb.ne.jp