Inflammatory mantle completely surrounding a leaking abdominal aortic aneurysm

Inflammation autour d’un anévrisme de l’aorte abdominale rompu

Hirofumi Kasahara\textsuperscript{a,}*, Yoshiito Inoue\textsuperscript{b}, Satoru Suzuki\textsuperscript{b}

\textsuperscript{a} Department of Cardiovascular Surgery, National Hospital Organization Saitama Hospital, 2-1 Suwa, Wako, 351-0102, Japan
\textsuperscript{b} Department of Cardiovascular Surgery, Hiratsuka City Hospital, Hiratsuka, Japan

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Ruptured inflammatory abdominal aortic aneurysm (AAA) is relatively rare and there has been little documentation of the process of rupture. An 83-year-old man presented with abdominal pain, abdominal tenderness and mild elevation of serum inflammatory makers for 1 week. Computed tomography demonstrated an AAA with a periaortic high-density area located just outside the calcified aorta, which was suspected to represent fresh haemorrhage. Emergency surgery revealed an inflammatory AAA with sealed rupture and localized haemorrhage into the thickened retroperitoneal fibrosis.

The thickened aneurysm wall with fibrous tissue is often so rigid at elective surgery that it is difficult to understand how extravasation into the retroperitoneal space can occur. To our knowledge, the present case is a rare example of leakage confined within the thickened retroperitoneal fibrosis and may represent a transitional state in the process of rupture through the inflammatory mantle surrounding the aorta. It also suggests that inflammatory tissue can completely enclose the AAA and prevent major leakage, thus maintaining haemodynamic stability for 1 week (Figs. 1 and 2).

\textbf{KEYWORDS}

Inflammatory abdominal aortic aneurysm; Ruptured abdominal aortic aneurysm

\textbf{MOTS CLÉS}

Anévrisme de l’aorte abdominale inflammatoire

\textit{Abbreviation:} AAA, abdominal aortic aneurysm.

* Corresponding author. Fax: +81 48 464 1138.

E-mail address: kasa7777@gmail.com (H. Kasahara).

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Figure 1. Plain computed tomography at 7 days after the onset of symptoms shows an infrarenal abdominal aortic aneurysm with a high-density area (asterisk) located just outside the calcified aorta (arrow). This high-density lesion was suspected to represent fresh haemorrhage.

Figure 2. Enhanced computed tomography demonstrates similar findings to plain computed tomography but distinguishes the lesion (asterisk) from the duodenum (arrowhead) more clearly. The periaortic high-density area seen on plain computed tomography was not enhanced by contrast medium, even in delay phase, suggesting that it was an isolated cavity filled with fresh haematoma.

Disclosure of interest

The authors declare that they have no conflicts of interest concerning this article.