Panoramic Laparoscopic View of Transverse Testicular Ectopia

Maiko Komatsubara, Tomohiro Kameda, and Tatsuo Morita

Transverse testicular ectopia (TTE) is a rare congenital anomaly in which both testes migrate toward the same hemiscrotum. We present a case of TTE in a 33-year-old man. Laparoscopy showed the left spermatic vessels, accompanied by parietal peritoneum, which formed a septum that divided the pelvic space into two, were extending transversely from the left lateral side of the descending colon toward the right internal inguinal ring over the sigmoid colon. A panoramic laparoscopic view of the spermatic vessels in TTE can clearly demonstrate the descending pathway and partly contribute to our understanding of the etiologic mechanisms of TTE. UROLOGY 85: e11–e12, 2015. © 2015 The Authors. Published by Elsevier Inc. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/3.0/).

Figure 1. Physical examination and scrotal ultrasonography. Physical examination (A) and scrotal ultrasonography (B) identifies 2 testes in the right hemiscrotum. Left testis (red arrow); right testis (green arrow).

A 33-year-old man was referred to our institution for further examination of an impalpable left testis. The physical examination revealed a surgical scar for right inguinal herniorrhaphy, left empty hemiscrotum, right testis, and another mass in the right hemiscrotum (Fig. 1A). Scrotal ultrasonography and magnetic resonance imaging showed both testes in the right hemiscrotum had similar echogenicity (Fig. 1B) and high signal intensity on T2-weighted images (Fig. 2), respectively. These findings led to a diagnosis of transverse testicular ectopia (TTE). To support this clinical diagnosis, we performed a laparoscopic examination, which is useful for the diagnosis and treatment of TTE1–8; the right spermatic vessels were normally located on the right psoas muscle and entered the right internal inguinal ring, whereas the left spermatic vessels, accompanied by parietal peritoneum, which formed a septum that divided the pelvic space into two, were extending transversely from the left lateral side of the descending colon toward the right internal inguinal ring over the sigmoid colon (Fig. 3). Although the etiologic mechanisms of TTE remain unclear,1,3,9 a panoramic laparoscopic view of the spermatic vessels (Fig. 3), which clearly demonstrates the descending pathway, may be helpful for understanding the etiologic mechanisms of TTE.

References


Financial Disclosures: The authors declare that they have no relevant financial interests.

From the Department of Urology, Jichi Medical University, Shimotsuke-shi, Tochigi, Japan
Address correspondence to: Tatsuo Morita, M.D., Ph.D., Department of Urology, Jichi Medical University, 3311-1 Yakushiji, Shimotsuke-shi, Tochigi 329-0498, Japan.
E-mail: moritatu@jichi.ac.jp
Submitted: November 13, 2014, accepted (with revisions): November 20, 2014

© 2015 The Authors. Published by Elsevier Inc. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/3.0/).

http://dx.doi.org/10.1016/j.urology.2014.11.015 e11

Figure 2. Magnetic resonance imaging. Magnetic resonance imaging shows that the 2 testes in the right hemiscrotum have similar high signal intensity on T2-weighted sagittal (A) and coronal (B) images. Left testis (red arrow); right testis (green arrow).

Figure 3. Panoramic laparoscopic view. Panoramic laparoscopic view shows the left spermatic vessels are extending transversely from the left lateral side of the descending colon toward the right internal inguinal ring over the sigmoid colon. Two images are fused at the white line. a, left internal inguinal ring; b, right internal inguinal ring; c, left spermatic vessels; d, right spermatic vessels; e, right vas deferens; f, right external iliac vessels; g, left external iliac vessels; h, right medial umbilical ligament; i, left medial umbilical ligament; j, bladder; k, sigmoid colon; l, urachal cyst.