Interventional and Endovascular Tips and Tricks of the Trade

Interventional and Endovascular Tips and Tricks of the Trade

Edited by

S. Lowell Kahn, MD, MBA, FSIR

Assistant Professor of Interventional Radiology and Surgery
Tufts University School of Medicine
New England Endovascular Center
West Springfield, Massachusetts

Bulent Arslan, MD, FSIR

Associate Professor of Radiology
Director, Vascular & Interventional Radiology
Rush University Medical Center
Chicago, Illinois

Abdulrahman Masrani, MD

Radiology Resident
Mallinckrodt Institute of Radiology
Washington University in St. Louis
St. Louis, Missouri

OXFORD
UNIVERSITY PRESS

OXFORD
UNIVERSITY PRESS

Oxford University Press is a department of the University of Oxford. It furthers the University's objective of excellence in research, scholarship, and education by publishing worldwide. Oxford is a registered trade mark of Oxford University Press in the UK and certain other countries.

Published in the United States of America by Oxford University Press
198 Madison Avenue, New York, NY 10016, United States of America.

Library of Congress Cataloging-in-Publication Data
Names: Kahn, S. Lowell, editor. | Arslan, Bulent (Associate professor of radiology), editor. | Masrani, Abdulrahman, editor.
Title: Interventional and endovascular tips and tricks of the trade / edited by S. Lowell Kahn, Bulent Arslan, Abdulrahman Masrani.
Description: Oxford ; New York : Oxford University Press, [2018] | Includes bibliographical references and index.
Identifiers: LCCN 2016036932 (print) | LCCN 2016038173 (ebook) | ISBN 9780199986071 (alk. paper) | ISBN 9780199986095 (e-book) | ISBN 9780199390885 (online)
Subjects: | MESH: Minimally Invasive Surgical Procedures—methods
Classification: LCC RD33.53 (print) | LCC RD33.53 (ebook) | NLM WO 505 | DDC 617/.057—dc23
LC record available at https://lccn.loc.gov/2016036932

9 8 7 6 5 4 3 2 1
Printed by Sheridan Books, Inc., United States of America

Contents

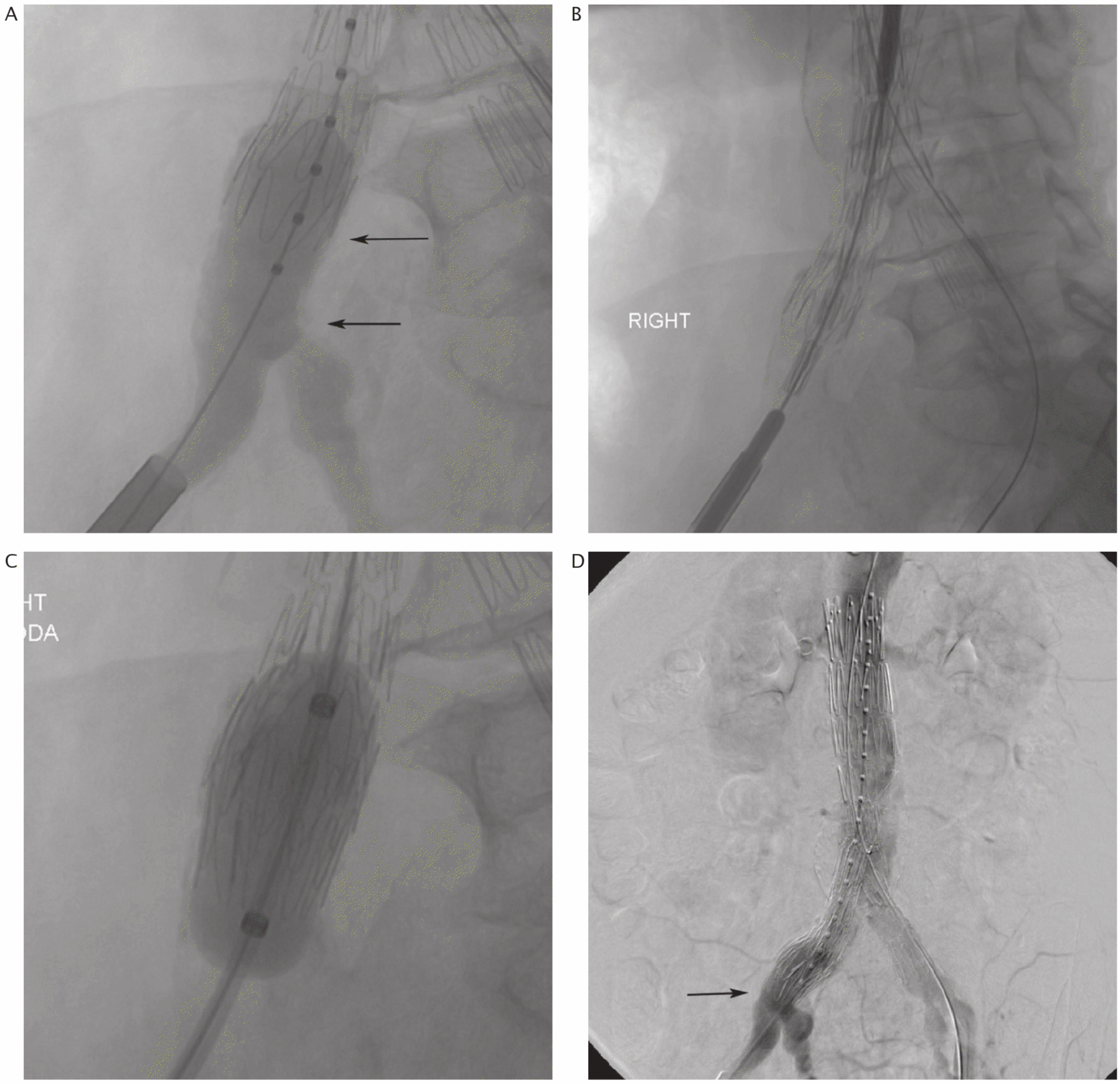

Figure 1.4 (A) Although there is a seal, it is best to cover the entire right common iliac artery aneurysm with an iliac extension (arrows). (B) Extension being inserted (Zenith). (C) A conformable balloon (Coda, Cook Medical Inc.) molds the limb to the iliac artery. Avoid dilating the native artery distal to the limb. (D) The limb now extends to the internal iliac artery (arrow), and there is no endoleak.

References and Suggested Readings

1. Sobocinski J, Briffa F, Holt PJ, et al. Evaluation of the Zenith low-profile abdominal aortic aneurysm stent graft. *J Vasc Surg*. 2015;62(4):841–847.
2. Stanley BM, Semmens JB, Mai Q, et al. Evaluation of patient selection guidelines for endoluminal AAA repair with the Zenith stent-graft: The Australasian experience. *J Endovasc Ther*. 2001;8(5):457–464.
3. Byrne J, Mehta M, Dominguez I, et al. Does Palmaz XL stent deployment for type 1 endoleak during elective or emergency endovascular aneurysm repair predict poor outcome? A multivariate analysis of 1470 patients. *Ann Vasc Surg*. 2013;27(4):401–411.
4. Jordan WD Jr, Mehta M, Varnagy D, et al. Results of the ANCHOR prospective, multicenter registry of EndoAnchors for type Ia endoleaks and endograft migration in patients with challenging anatomy. *J Vasc Surg*. 2014;60(4):885–892.e2.
5. Katada Y, Kondo S, Kondo T, Yamabe T. Endovascular treatment for type Ia major endoleak after endovascular aneurysm repair. *J Vasc Surg*. 2014;59(5):1430–1431.
6. Demanget N, Latil P, Orgeas L, et al. Finite element analysis of the mechanical performances of 8 marketed aortic stent-grafts. *J Endovasc Ther*. 2013;20(4):523–535.

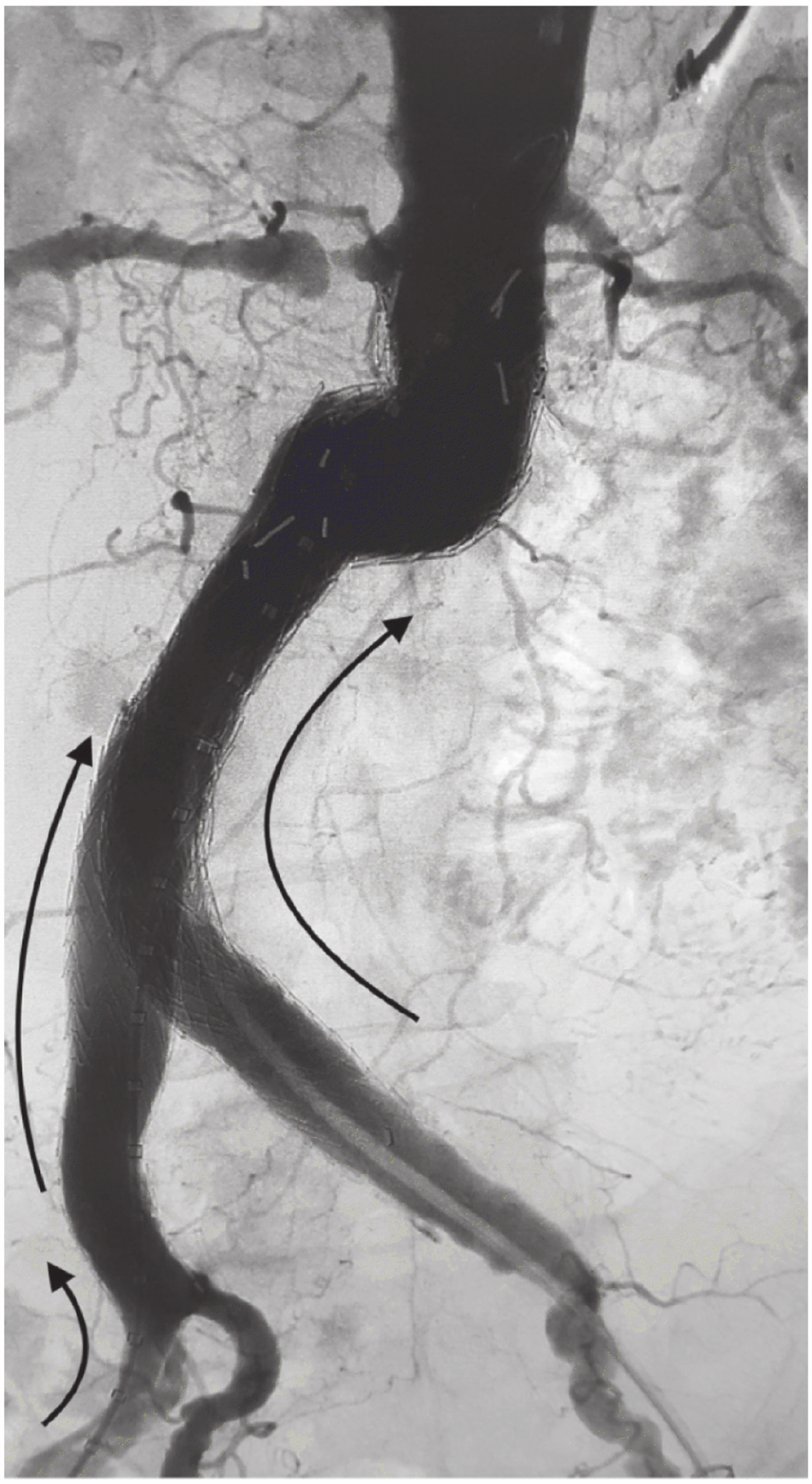

Figure 2.3 C-curve technique. Coronal DSA aortogram shows a tortuous aorta. The summation of the angles (arrows) of the tortuous aorta shows the right side to have more of an "S" configuration, whereas the left side has more of a "C" configuration. Based on the angles, a more accurate deployment was obtained by placing the main body from the left side access.

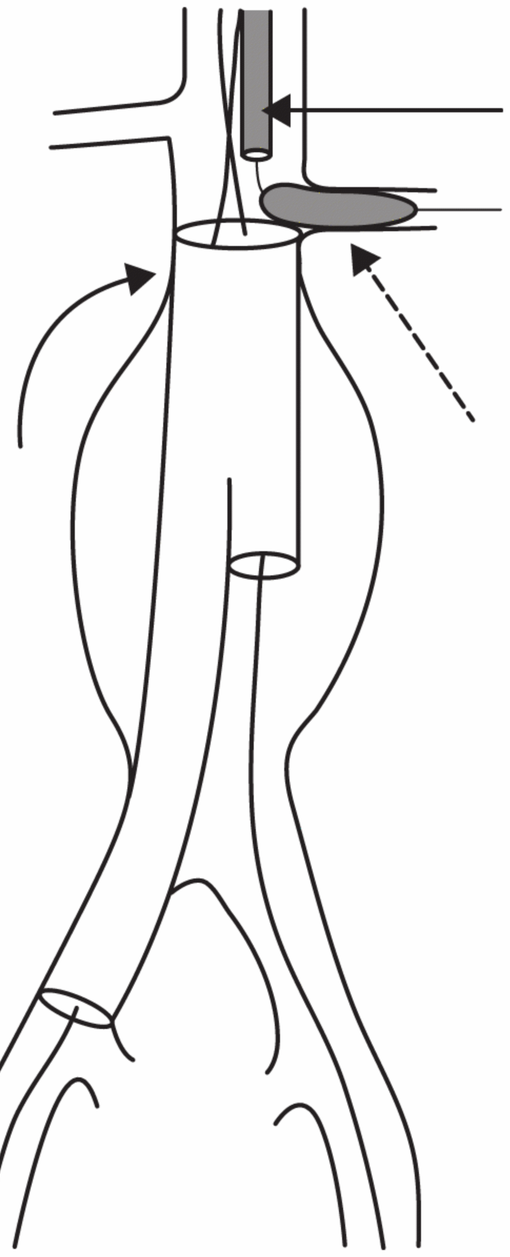

Figure 2.4 Renal buddy wire technique. Schematic demonstrates advancement of a sheath (solid arrow) from a left brachial approach with the tip lying just above the lower left renal artery. A balloon (dashed arrow) is placed into the left renal artery and extends a short distance into the aorta. The balloon protects the left renal artery while the C3 Excluder (curved arrow) is positioned immediately adjacent to the left renal artery to maximize seal in a short, reverse taper neck.

References and Suggested Readings

1. Katsargyris A, Oikonomou K, Bracale UM, Verhoeven EL. Unexpected complication with the new C3 excluder: Cause and treatment. *Cardiovasc Intervent Radiol*. 2013;36(2):536–539.
2. Maudet A, Daoudal A, Cardon A, et al. Endovascular treatment of infrarenal aneurysms: Comparison of the results of 2nd and 3rd generation stentgrafts. *Ann Vasc Surg*. 2016;May 9 [Epub ahead of print].
3. Katsargyris A, Mufty H, Wojs R, Utech G, Verhoeven EL. Single-centre experience with the Gore C3 Excluder stent-graft in 200 consecutive patients. *J Cardiovasc Surg*. 2016;57(4):485–490.
4. Verhoeven EL, Katsargyris A, Bachoo P, et al.; GREAT European C3 Module Investigators. Real-world performance of the new C3 Gore Excluder stent-graft: 1-year results from the European C3 module of the Global Registry for Endovascular Aortic Treatment (GREAT). *Eur J Vasc Endovasc Surg*. 2014;48(2):131–137.
5. Katsargyris A, Botos B, Oikonomou K, Pedraza de Leistl M, Ritter W, Verhoeven EL. The new C3 Gore Excluder stent-graft: Single-center experience with 100 patients. *Eur J Vasc Endovasc Surg*. 2014;47(4):342–348.
6. Krajcer Z. The Gore Excluder AAA endoprosthesis with C3 delivery system: Results in high-volume centers. *J Cardiovasc Surg*. 2014;55(1):41–49.