The advent of flow diversion (FD) represents a paradigm shift in the treatment of intracranial aneurysms (IA). Prior to FD, endovascular treatment of aneurysms was limited to intrasaccular treatment—or “filling the pothole.” While adjuvant technologies, such as balloon- or stent-assisted coiling, expanded the indications for endovascular treatment, many wide neck and fusiform aneurysms remained entirely untreatable or incompletely treatable by endovascular means. If coiling is merely filling potholes, FD “repaves the entire road” by inducing stasis of flow within the aneurysm and providing a scaffold for reendothelialization, and ultimately, vessel reconstruction.

Flow diverters have revolutionized clinical decision-making for IAs since their introduction into practice in the mid-2000s. Many IAs that once conferred high likelihood of incomplete treatment, or recurrence following stent coiling, or necessitated complex microsurgical strategies, such as high-flow bypass and trapping, are now more easily and definitively treatable with FD. Indeed, since FDA approval of FD for treatment of large and giant, wide neck internal carotid artery aneurysms, the proportion of such aneurysms treated by traditional means has plummeted in the United States, even at the busiest cerebrovascular centers. What’s more, FD is being increasingly employed, to great effect, to treat off-label IAs, such as small- and medium-sized aneurysms and those located in the posterior or distal anterior circulation.

While off-label indications continue to expand, FD is not a panacea. Complication rates for FD were initially quite high relative to conventional endovascular therapy. Recent series demonstrate that with collective, gained experience, complication rates have dramatically improved. Yet questions remain. When is adjuvant coiling necessary? How many devices should be deployed? In parts of the world where the gamut of flow diverters are available, do particular devices provide advantageous characteristics in certain circumstances? When should follow-up imaging be completed and with what modality? How should residual aneurysm filling be managed? Are neck remnants clinically significant? How can we further limit complications? Are certain dual antiplatelet regimens more effective at preventing thromboembolic complications with lower hemorrhagic complication rates? Will antiplatelet coatings limit the need for dual antiplatelet therapy and expand the indications for FD into the realm of treatment for acutely ruptured IAs? Can new generation devices and delivery systems make navigation and deployment easier, specifically in patients with tortuous anatomy? What are the indications for FD in pediatrics? Can we hone in on specific indications for posterior circulation FD to continue to bring down the complication rate for use in the vertebrobasilar system? Can consensus be reached regarding indications for FD more broadly?

The literature has exploded in recent years with studies regarding all aspects of FD. As yet, however, no go-to text has been published vis-à-vis FD. While primary literature remains the gold standard to answer specific research questions, tertiary sources serve to focus our attention and aggregate the most important aspects of a field. Textbooks provide accessible, summarized data about complex clinical problems and techniques in a medium whereby world experts converse amongst each other, but also to early and advanced learners in each field. Flow Diversion of Cerebral Aneurysms, edited by Park, Taussky, Albuquerque, and McDougall, aims to serve as the benchmark compendium for FD.

The book is divided into 21 chapters, logically ordered to build on previously acquired knowledge. Chapters 1 and 2 are concise, but well written, and provide the historical and
mechanistic underpinnings of FD, which frames and contextualizes the ensuing chapters. The last chapter leaves us with a taste of future technologies and thirst to pursue them. In between is an exhaustive review of all aspects of patient care as it relates to FD. Clinical decision-making is thoughtfully discussed, as are on- and off-label indications. The pharmacology surrounding dual antiplatelet therapy is elucidated. A particularly compelling aspect of the book is that an individual chapter is dedicated to each of the 4 major, commercially available flow diverters. This feature, authored by recognized leaders in the field, makes *Flow Diversion of Cerebral Aneurysms* a single defining resource for learners and practitioners alike to compare and contemplate the idiosyncratic properties of each device and how those characteristics might be employed to treat individual patients with unique anatomy. The remaining chapters delve into complication management, follow-up imaging, and considerations surrounding if and how to treat residual aneurysms after FD.

The authors and editors of *Flow Diversion of Cerebral Aneurysms* should be commended for assembling what is sure to be the foremost treatise on FD to date. In a mere 153 pages, the entirety of the current state of FD for the treatment if IAs is enumerated, dissected, discussed and repackaged in a way that is easy to read, but exhaustive. *Flow Diversion of Cerebral Aneurysms* will surely prove to be an invaluable resource for trainees in neuroendovascular surgery and experienced interventionists alike.

**Disclosure**

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