Access and Closure Techniques

This month, we have a special focus on access and closure after a very successful educational track on this topic was conducted at ISET 2010 in south Florida. “Getting In and Getting Out” represent the sources of the most common complications in our field, and therefore, an imperative for further information and education is warranted. The use of closure devices is expanding in vascular intervention, and there is growing interest in preclose techniques to reduce the invasiveness of the increasing number of large-device endovascular and structural heart cases. To open our feature, Parag J. Patel, MD, and Rahul S. Patel, MD, offer an overview of the currently available guidewires, catheters, and sheaths, as well as their process for selecting the ideal devices for each case.

Among the recent trends in vascular access is the increasing implementation of the radial approach. Ramon Quesada, MD, examines this technique from patient selection and preprocedure planning to postprocedure considerations and results. Additional alternative routes for percutaneous access are via the brachial and axillary arteries. Thomas A. Sos, MD, reviews this technique, including the unique anatomic considerations and potential complications.

Next, Klaus Mathias, MD, takes us step by step through his technique for completely percutaneous EVAR, explaining the advantages of this approach as well as the results he has had in its practice. Frank J. Criado, MD, continues this discussion with a pointed look at percutaneous EVAR technique compared to traditional surgical cutdown. Although there is much enthusiasm for preclose suture-mediated techniques, there should be more studies that document clinical benefit and, in particular, cost efficacy. The current randomized clinical trial with Endologix and Abbott Vascular to compare preclose with arteriotomy in a prospective way will hopefully shed further light on the issues of cost and clinical benefit.

Finally, Zoltan G. Turi, MD, presents his annual review of the current state of vascular closure. This extensive overview details the predominant techniques in the field, as well as the newly available technology and literature. We have also included our charts showing the updated sizes and specs for closure and assisted compression devices.

In addition to our cover stories, we present a Vessel Update article in which Andrzej Boguszewski, MD; James Torey, PA-C; Ramamanohara Pai, MD; Desikan Kamalakannan, MD; Dane Jefic, MD; and Thomas Davis, MD, describe their results with IVUS-validated intraluminal recanalization of SFA chronic total occlusions. In our closing interview, we talk with Matt Thompson, MD, who has much to tell us about EVAR in terms of cost-effectiveness, recent research efforts, and trial results, with an emphasis on work in the United Kingdom.

As always, we hope you find this issue to be of value in your daily practice.

Barry T. Katzen, MD, Chief Medical Editor