Book review

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Atlas of Dialysis Vascular Access

Author: Tushar J Vachharajani

Year of publication: 2010

Fistula First website http://www.fistulafirst.org/

Number of pages: 67

Haemodialysis nurses are aware of the importance of optimum vascular access management. Meticulous vascular access care and monitoring can mean the extension of the life of the access and a reduction in the need for further surgery. Additionally, any actions that reduce hospitalisations, infection risk, pain and interruptions to family life and employment are especially important to a patient requiring chronic haemodialysis.

The author, Tushar Vachharajani, has many years of experience in vascular access management and his aim in writing the Atlas of Dialysis Vascular Access is simply to improve the quality of vascular access care. This atlas is located on the Fistula First website (www.fistulafirst.org) ensuring international, relatively free access for all interested health care professionals. The atlas is also located on the website with an audible footprint depicting normal and abnormal bruit sounds, making the experience more real for the learner.

This concise atlas of haemodialysis vascular access incorporates the many problems associated with their use. It is a suitable reference for everyone involved in the care of patients requiring haemodialysis, including dialysis nurses, medical students, technicians, clinical educators and, most importantly, the patients.

The chapter on arteriovenous fistulas is worth ‘a thousand words’. As many clinicians are aware, the longer a temporary tunnelled catheter remains in situ, the greater the chance a mechanical problem or infection can develop, leading to the probable removal of the catheter and the loss of essential dialysis access. Unfortunately, temporary catheters can often become a means of long-term access, particularly with elderly patients and those with poor vasculature. This highlights the need for optimal catheter care. The main objective of this chapter has definitely been achieved — to help the reader identify both mechanical problems and infections through the use of diagrams and photographs. The greater the clinician’s knowledge in this area, the sooner problems can be identified and managed.

A great deal of frustration can be removed for the clinician if they are more aware of what might be going on inside the patient’s vasculature. This is where the diagrams, backed up by colour photographs, assist the reader to understand the possible causes for any problems. The use of colour photographs throughout this book, as opposed to black and white, can be especially helpful when attempting to visualise the start of a possible complication.

The chapter on arteriovenous fistulas and grafts provides various visual images of the basic anatomy and common placement sites of fistulas and grafts. These are helpful in understanding how an access looks as opposed to reading a description from a textbook. Once again it is helpful to have images with ‘real’ patients, depicting various complications such as stenosis, aneurysms, haematomas, central vein stenosis, pseudoneurysms and collateral veins. The atlas helps to identify complications which can be easily missed if you don’t know what to look for. It was useful to see clearly marked and labelled pre- and post-fistulogram images in the atlas with explanations outlining how a fistulogram can identify a problematic access.

If a health care professional or patient does not know how to identify common problems related to haemodialysis access, this atlas can be a starting point in picking up clues in access-related complications. However, if the reader requires in-depth information on the prevention, causes and the management of access complications, further reading is required. The atlas is concise and easily understandable for all health professionals but would benefit from an expansion of the glossary to include terms such as ‘swing site’. The layout is visually appealing and progresses in a logical order. We are impressed with the quality of the photographs and the clear illustrations of many of the common vascular access problems that confront haemodialysis patients. Providing only one picture or diagram to a page with a clear and concise caption makes this book easy to read. As the book is web-based, it can be accessed for private study at home or on unit-based computers as a practical clinical education tool.

Overall, we recommend the Atlas of Dialysis Vascular Access to anyone involved in caring for haemodialysis patients. We can see this atlas being a very useful tool for training of renal staff and for patient education, especially home dialysis patients.

Chapters
Anatomy of dialysis vascular access;
Tunnelled catheters
Arteriovenous fistulas
Arteriovenous grafts
Glossary

Glossary

Arteriovenous grafts
Arteriovenous fistulas
Arteriovenous fistulas
Central venous access
Dialysis access
Fistula
Graft
Hematoma
Infection
Stenosis
Aneurysm
Central vein
Pseudoaneurysm
Collateral vein

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