On-line education from the EDTNA/ERCA Education Board
Clinical topic for January 2003

Vascular Access

This is the second in the series of on-line educational initiatives from the Education Board. You are invited to review the following websites and/or articles from the internet. Sections 1-6 are to update your general knowledge on vascular access, and section 7 contains a selection of the latest relevant publications. After reviewing the references, evaluate your knowledge and reflect on possible improvements to patient care by answering the questions in section 8.

If you are updating your knowledge and wish to include the number of learning hours that you have spent on this work, complete section 6 below and then include your answers in the EDTNA/ERCA Professional Portfolio that is available free to members from EDTNA/ERCA Head Office (translated into nine languages). See the following EDTNA/ERCA journal for further details

EDTNA/ERCA, XXVI, 4, 41-44


“For most people, the best kind of vascular access is an AV fistula. It requires advance planning because a fistula takes a while after surgery to develop (in rare cases, as long as 24 months). But a properly formed fistula is less likely than other kinds of vascular access to form clots or get infected. Also, fistulae tend to last many years, longer than any other kind of vascular access.”

2. Schrier Atlass of Kidney Disease (Free nephrology textbook); Volume V, Chapter 5
DIALYSIS ACCESS AND RECIRCULATION
Toros Kapoian, Jeffrey L. Kaufman, John L. Nosher, and Richard A. Sherman

Open: CHAPTER 5

MMWR Recommendations and Reports, Volume 51, Number RR-10 Intravascular Catheter-Related Infections in Adult and Pediatric Patients. The MMWR series of publications is published by the Epidemiology Program Office, Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services, Atlanta, GA 30333.

“These guidelines have been developed for practitioners who insert catheters and for persons responsible for surveillance and control of infections in hospital, outpatient, and home health-care settings. Major areas of emphasis include 1) educating and training health-care providers who insert and maintain catheters; 2) using maximal sterile barrier precautions during central venous
catheter insertion; 3) using a 2% chlorhexidine preparation for skin antisepsis; 4) avoiding routine replacement of central venous catheters as a strategy to prevent infection; and 5) using antiseptic/antibiotic impregnated short-term central venous catheters if the rate of infection is high despite adherence to other strategies (i.e., education and training, maximal sterile barrier precautions, and 2% chlorhexidine for skin antisepsis). These guidelines also identify performance indicators that can be used locally by health-care institutions or organizations to monitor their success in implementing these evidence-based recommendations.”

4. NKF-K/DOQI CLINICAL PRACTICE GUIDELINES FOR VASCULAR ACCESS
Open: [http://www.kidney.org/professionals/doqi/guidelines/doqi_uptoc.html#va](http://www.kidney.org/professionals/doqi/guidelines/doqi_uptoc.html#va)

Open: [http://www.edtna-erca.org/articles_details.asp?id=83#vasc](http://www.edtna-erca.org/articles_details.asp?id=83#vasc)

6. Books
- **DIALYSIS ACCESS Current Practice** Edited by J A Akoh (Derriford Hospitals, Plymouth, UK) & N S Hakim (Imperial College School of Medicine, St. Mary's Hospital, UK. World Scientific Publishers, 416 pp, publication date May 2001; US $ 75 / £ 50. [http://www.wspc.com/books/medsci/p145.html](http://www.wspc.com/books/medsci/p145.html)

7. Selection of the latest publications on vascular access
- L Dinwiddie. Caring for your Vascular Access. Very basic article: Fistulas and Grafts; Tips for caring for your Fistula or Graft; Catheters; Tips for caring for your Catheter. Open: [http://www.esrdnetworks.org/vascular_access.htm](http://www.esrdnetworks.org/vascular_access.htm)

8. Evaluation and reflection
Review questions

• What advice should you give patients concerning care of native AV fistula, graft and central line?
• Compare and contrast the benefits and limitations of a native AV fistula, graft and temporary/permanent central line
• Infection risk – how might you reduce the incidence of fistula, graft or catheter-related infection in your unit? How does your practice compare with the K/DOQI recommendations?
• Identify the most important way in which your current practice related to vascular access needs to be improved

Reflection

• How many learning hours have you spent on reading and reviewing the websites/articles/abstracts?
• Which was the most useful article/abstract that you reviewed, and why?
• How does this most useful article/abstract relate to your work and how has it or will it inform and influence your practice?
• Is there any further learning that you have identified that you may do related to this topic?

We hope that you have enjoyed the second of our on-line educational programmes. Please address any queries or questions to Head Office. I would like to thank André Stragier, the EDTNA/ERCA Communication and Publication Relations Officer for his invaluable help and support in searching the internet for appropriate websites and articles. The next topic will be renal nutrition, to be published on the Homepage in February 2003.

Nicola Thomas
Education Board Chair
21 December 2002