Awareness about transcatheter removal of intravascular foreign bodies among pediatric health care providers

Jadoon S., AlMasham Y. El Segaier M. Galal MO.
Department Pediatric cardiology, Prince Salman Heart Center, King Fahad Medical City, Riyadh, KSA

Background: Central line insertion is a routine for invasive hemodynamic monitoring, total parenteral nutrition, infusion chemotherapy and medications. Fragmentation and dislodgment of lines into the vascular system is a rare complication. From our experience with the mode of referral of four patients, we had the impression that not all the paediatricians are aware of transcatheter approach to solve this problem.

Aim: To study the awareness of paediatric health care providers about the non surgical methods of retrieval of intravascular/cardiac foreign bodies.

Methods: A questionnaire was developed with 3 questions and given to all paediatric healthcare providers in two large tertiary care centres. The three questions were about number of patients seen with central line, experience with complications and which speciality would they refer patients with dislodged central lines. We included in the questionnaire residents beyond the 3rd year of training, fellows, consultants, of all paediatric subspecialities, including surgery.

Results: The questionnaire was given to 128 professionals. A total of 101 persons (79 %) answered the questionnaire. Out of these 101, 14 were excluded due to incomplete answers. Total 87 questionnaires were included for analysis. 18% were consultants, 38% were assistant consultants and senior registrars, 43% were senior residents. Results showed that of those who answered the questionnaire, 39% saw more than 30 central lines per year, 39 % experienced this complication. 81.5 % opted for surgical method of removal, mostly to paediatric surgery (61%). Only 18.5% chose for nonsurgical methods. At our centre we successfully removed 4 lines over last 2 years.

Conclusions: Most paediatric health care providers in the two tertiary care hospitals evaluated are not aware that patients with such complications should be referred to paediatric cardiologists as percutaneous retrieval of intravascular foreign bodies is the standard method of treatment that can be performed easily, safely and successfully. It is important to raise the knowledge of percutaneous approach in paediatric services. Successful retrieval can obviate the need for major surgeries.