Nurses perspective on Cannulation devices – Results of an International Survey

*Presented by*
Ilaria de Barbieri & Andy Cox
A joint project between EDTNA/ERCA and Medtronic
ILARIA DE BARBIERI

- RN, phD
- 2004 - EDTNA/ERCA Member
- 2012 – EDTNA/ERCA Volunteer
- 2016 - Member of the EDTNA/ERCA Executive Committee
- 2016 - Scientific Programme Committee link
- 2017 - EDTNA/ERCA Research Group link
OBJECTIVES OF EDTNA/ERCA

- One of the objectives of the EDTNA/ERCA is improving clinical practice through **EDUCATION**.

- Cannulation Devices across Europe and its implications

- The aim of this Collaboration is:
  - To reach all renal healthcare professionals caring for Chronic Kidney Disease patients
  - To offer them the chance to learn from experts about Cannulation Devices
  - To increase the awareness on devices for cannulation and its implications
OBJECTIVES OF THE SURVEY

- To Investigate the common use of Cannulation Devices
- To identify the implications using a plastic cannula vs a metal needle for cannulation
- To Identify educational gaps and need for further provision of knowledge for renal nurses
METHOD

- Multicenter online survey across Europe and over May – August, 2018
- A convenience sample → EDTNA/ERCA nurse member database
- Participation was voluntary
- Anonymous data
- Questionnaire for the purpose, investigating the knowledge on cannulations devices and its use
- Open & close questions
THE RESULTS – BIOGRAPHICAL DATA

- 294 responses from 38 countries
- Age: 25 – 55 years old
- Gender: 74% Females
- Profession: 67% Staff Nurses
- Years of Experience within HD: 72% with >10 years
- In what type of centre do they currently work in: 71% Public
SIZE OF THE CENTRE / TOTAL PATIENTS

Responses

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TIMELINE of THE RESEARCH PROJECT

**PHASE 1**
- Start up of the development and design of the Survey
- Review and Quality Management Process
- The Survey was sent out

**PHASE 2**
- In-depth analysis of the data
- Webinar
- Consolidation of data
- Result presented in Genoa

- Abstract
- Scientific Article

- 48th EDTNA/ERCA Conference, Prague
THANK YOU VERY MUCH FOR YOUR ATTENTION!
ANDY COX

2017  Corporate Member EDTNA/ERCA
2015  Business Unit Leader Medtronic - Renal Access
2011  Director Training Covidien - Surgical Devices
2007  Clinical Training Manager - Energy Based Devices
2004  Medical Device Sales – Valleylab Electrosurgery Systems
2002  UK Environment Agency – Assistant Scientist
2001  BSc (Hons) Environmental Science
Experience based segmentation built into questionnaire

- Start
- 294 response
- 27% using Fistula Cannula
- 73% Not using Fistula Cannula
- Aware of Fistula Cannula
- 72%
- Not aware of Fistula Cannula

- 28%
In an ideal situation, what blood flow rate do you consider optimal?

**NEW AVFS**

- 200 ml/min: 70 responses
- 250 ml/min: 90 responses
- 300 ml/min: 40 responses
- 350 ml/min: 10 responses
- 400 ml/min: 0 responses
- 450 ml/min: 0 responses

**MATURE AVFS**

- 200 ml/min: 50 responses
- 250 ml/min: 30 responses
- 300 ml/min: 40 responses
- 350 ml/min: 80 responses
- 400 ml/min: 60 responses
- 450 ml/min: 50 responses
In an ideal situation, for mature AVFs, what limits of pressures (positive and negative) do you consider acceptable?

**VENOUS (POSITIVE)**

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**ARTERIAL (NEGATIVE)**

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What type of needles do you use in your center?

- **75%** Metal Needles
- **25%** Plastic Cannulae
Please indicate the % of complicated fistula in your center

- <5%
- 5-10%
- 10-15%
- 15-20%
- 20-25%
- 25-30%
- >30%
Within the complicated AVFs please indicate the distribution of the below listed types (%)?

- Deep: 15%
- Elbow located: 20%
- Stenosed: 25%
- Tortuous: 10%
- Newly created/fragile: 5%
Estimate the percentage and in which phase of the procedures, the infiltration/haematoma occur.
Which are the main reasons for not using Plastic Cannula any longer?

- Too expensive
- No clear benefit vs current practice
- Challenges in changing cannulation procedure
- Cannulation: e.g. grip/needs of additional steps
- Fixation or security e.g. taping
- Other
- Patient resistance

0 5 10 15 20
Conclusion: Further investigation required

Round Table Discussion
Sunday 14:00 – 15:30  Maestrale S09
Chair: Maria Teresa Parisotto
Speakers:
  Vicki Smith - Australia
  Rosa Marticorena - Canada
  Marisa Pegoraro - Italy
THANK YOU VERY MUCH FOR YOUR ATTENTION!