

These presentations were developed by the respective presenter(s), and the findings, interpretations, and conclusions contained or expressed with them do not necessarily reflect the views of BD. To the extent these presentations relate to specific products, such products should always be used in accordance with the relevant instructions for use and other product documentation. This content should not be copied or distributed without the consent of the copyright holder. For further information, please contact: GMB-EU-MDS@bd.com

Implementing a nurse led vascular access team

Núria Borràs-Maixenchs

Hospital Clínic

Barcelona

Disclosures

In relation to this presentation, I declare BD covering traveling expenses and a presentation fee

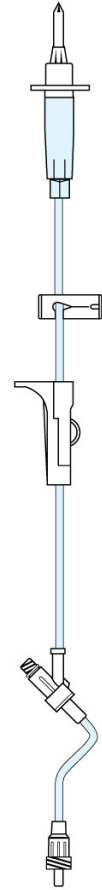
Objective

Present an overview of the history of the Infusion Therapy Team implementation at the Hospital Clinic of Barcelona

Point out elements that helped to build the project

Recent achievements and future team challenges

How did the service start and develop overtime?



Learn from others' experiences

- All catheter dressings looked-alike



- Device selection

- Taught patients and family members to perform catheter care: doing one-on-one teaching (empower patients)

Program replication

- Information sharing was difficult
- No electronic databases to spread knowledge
- There were no mechanisms other than magazine subscription



Trends in 2005

- Outpatient clinics development
- Continuous intravenous chemotherapeutic infusion drugs were being incorporated into more treatment protocols
- Shortening hospital stays
- Home care programs



What played a great role?



- Infusion pump technology
- Patient preferences
- Pressing problem: to meet patient demands
- Peripherally inserted central catheter (PICC) being placed by nurses

Case 1: TPF

TPF is the name of a chemotherapy combination that includes

- Docetaxel (Taxotere)
- Cisplatin
- Fluorouracil (5-FU)

It is a treatment for head and neck cancers

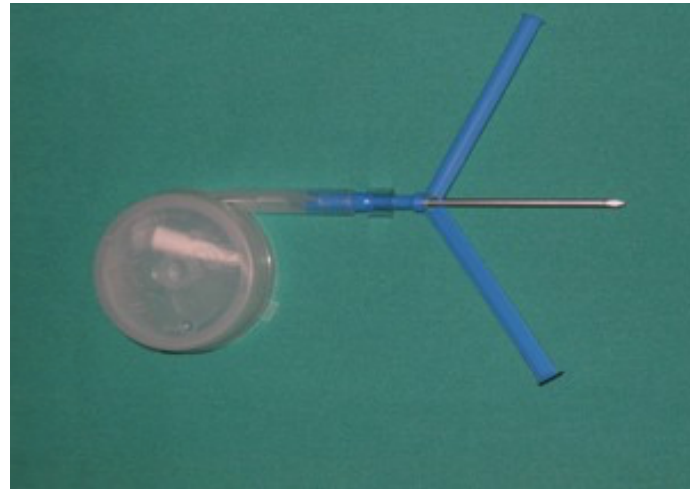
Short daily infusions of 5-FU/
Five-day continuous infusion of 5-FU

Patients needed to have a central line

- Central line (CVC)
- PICC line
- Subcutaneous iv port

Case 1: TPF

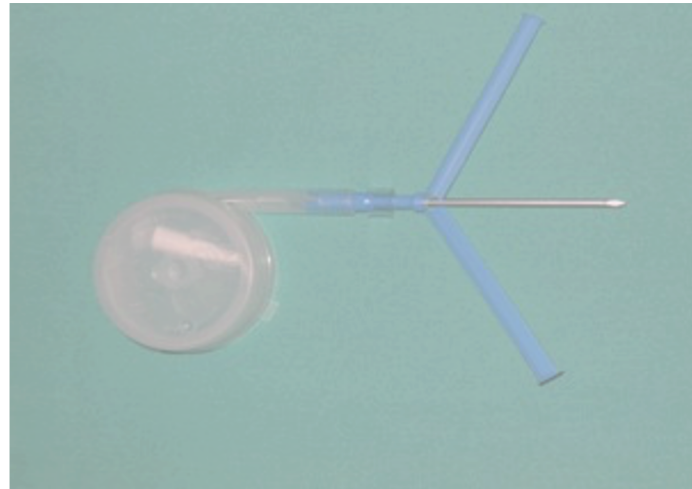
Peripherally inserted central catheters of that time



Ros M, Borràs N, Domingo JM “Identifying patients at high risk for venous thrombotic events related to 5-FU administered as a continuous infusion through peripherally inserted central venous catheter with ambulatory pump”. Presented ECCO-13, Paris 30 october-3 November 2005

Case 1: TPF

Peripherally inserted central catheters of that time



It took time to do more good than harm!

Ros M, Borràs N, Domingo Doménech JM “Identifying patients at high risk for venous thrombotic events related to 5-FU administered as a continuous infusion through peripherally inserted central venous catheter with ambulatory pump”.
Presentació oral: ECCO-13, París 30 octubre-3 novembre 2005.

2011: Great leap forward



Guidelines for the Prevention of Intravascular Catheter-Related Infections, 2011

Naomi P. O'Grady, M.D.¹, Mary Alexander, R.N.², Lillian A. Burns, M.T.,
Dellinger, M.D.⁴, Jeffery Garland, M.D., S.M.⁵, Stephen O. Heard, M.D.⁶,
M.D.⁷, Henry Masur, M.D.¹, Leonard A. Mermel, D.O., Sc.M.⁸, Michele
Raad, M.D.¹⁰, Adrienne Randolph, M.D., M.Sc.¹¹, Mark E. Rupp, M.D.¹²,
M.P.H.¹³ and the Healthcare Infection Control Practices Advisory Comm

New materials and products

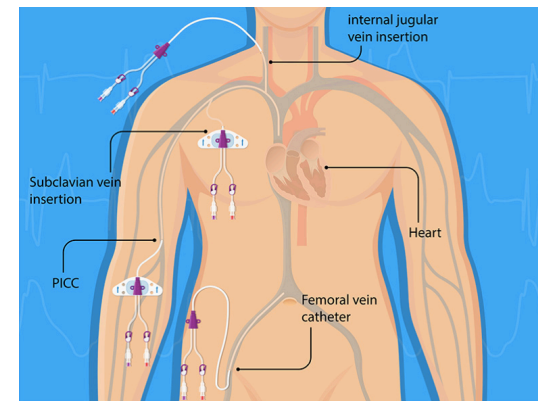


Achieving Zero Catheter Related Blood Stream Infections: 15 Months Success in a Community Based Medical Center

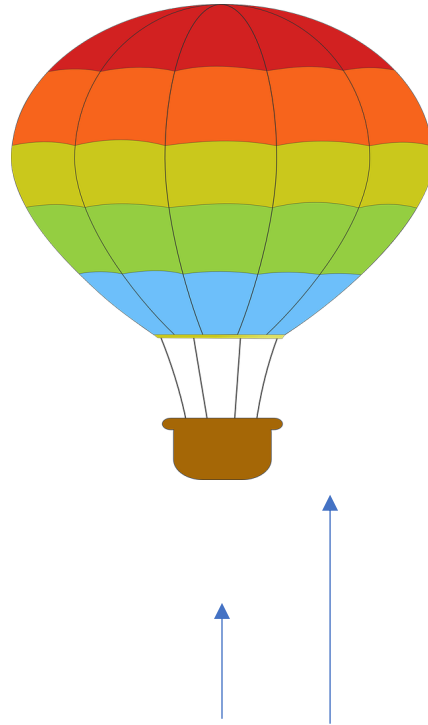
Sophie A. Harnage, BSN, RN

Knowledge, skills and technology at patient's bedside

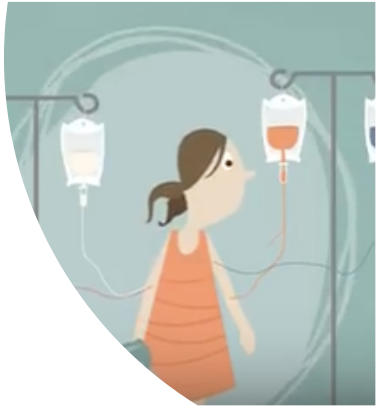
- Designate only trained personnel for the insertion
- Line placement performed with ultrasound guidance
- Catheter material improvement
- Benefits of placing PICC devices using micro-puncture to reduce complications
- Sutureless securement devices
- CLAB Zero campaign
- Bundles extended to all central lines



IV Team- ICMHO



Which benefits does the IV team offer to the hospital?

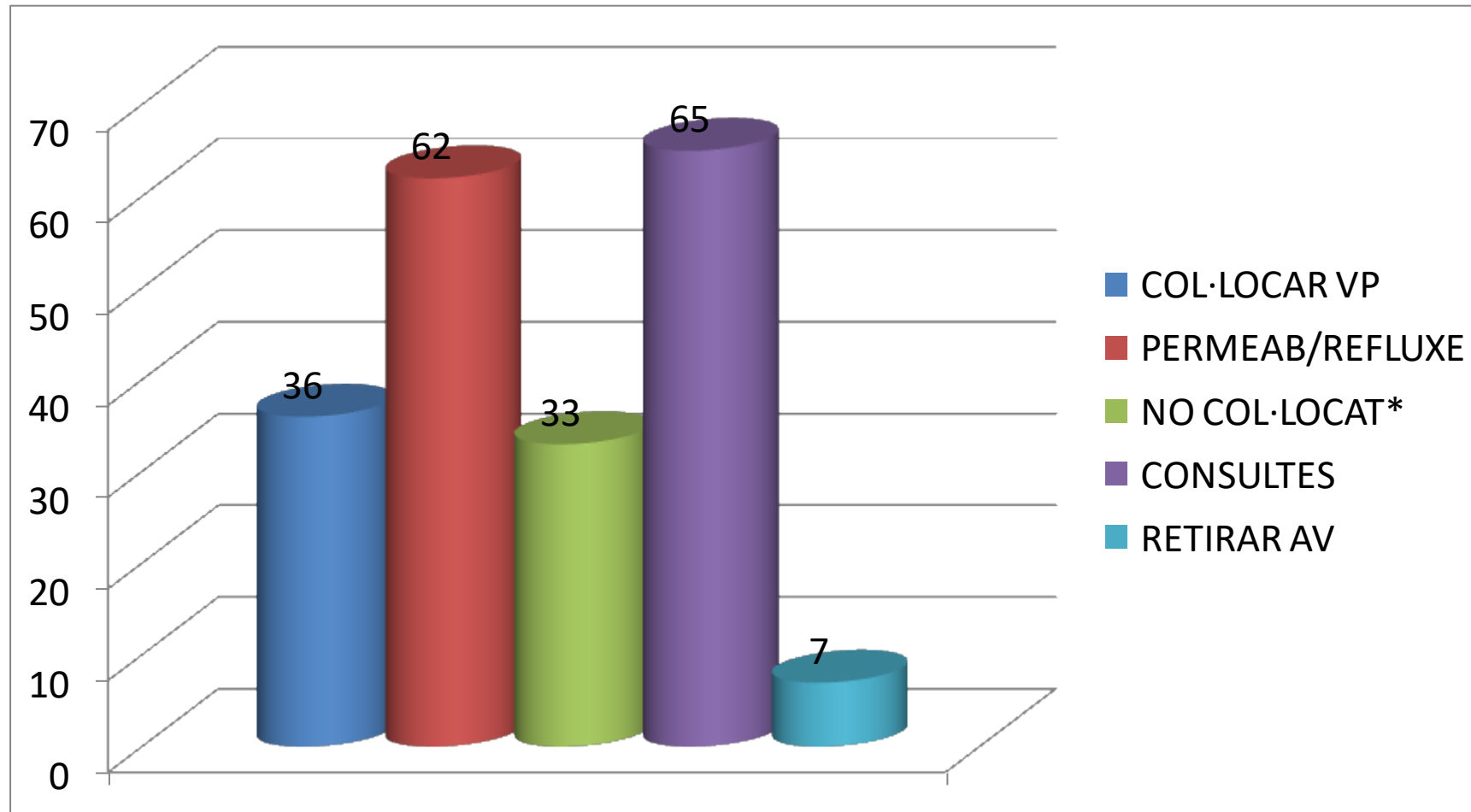


- The team currently operates with: 4RNs, 2 full time nurses, 2 part-time, infection control staff support and angioradiology assistance on demand
- Responsible for: obtaining informed consent, outpatient and ward bedside PICC insertions, providing guidance on device selection and maintenance, problem solving for most of the catheters and reservoirs, patient chart recording and data base keeping
- Ward nurses perform after insertion care and removal

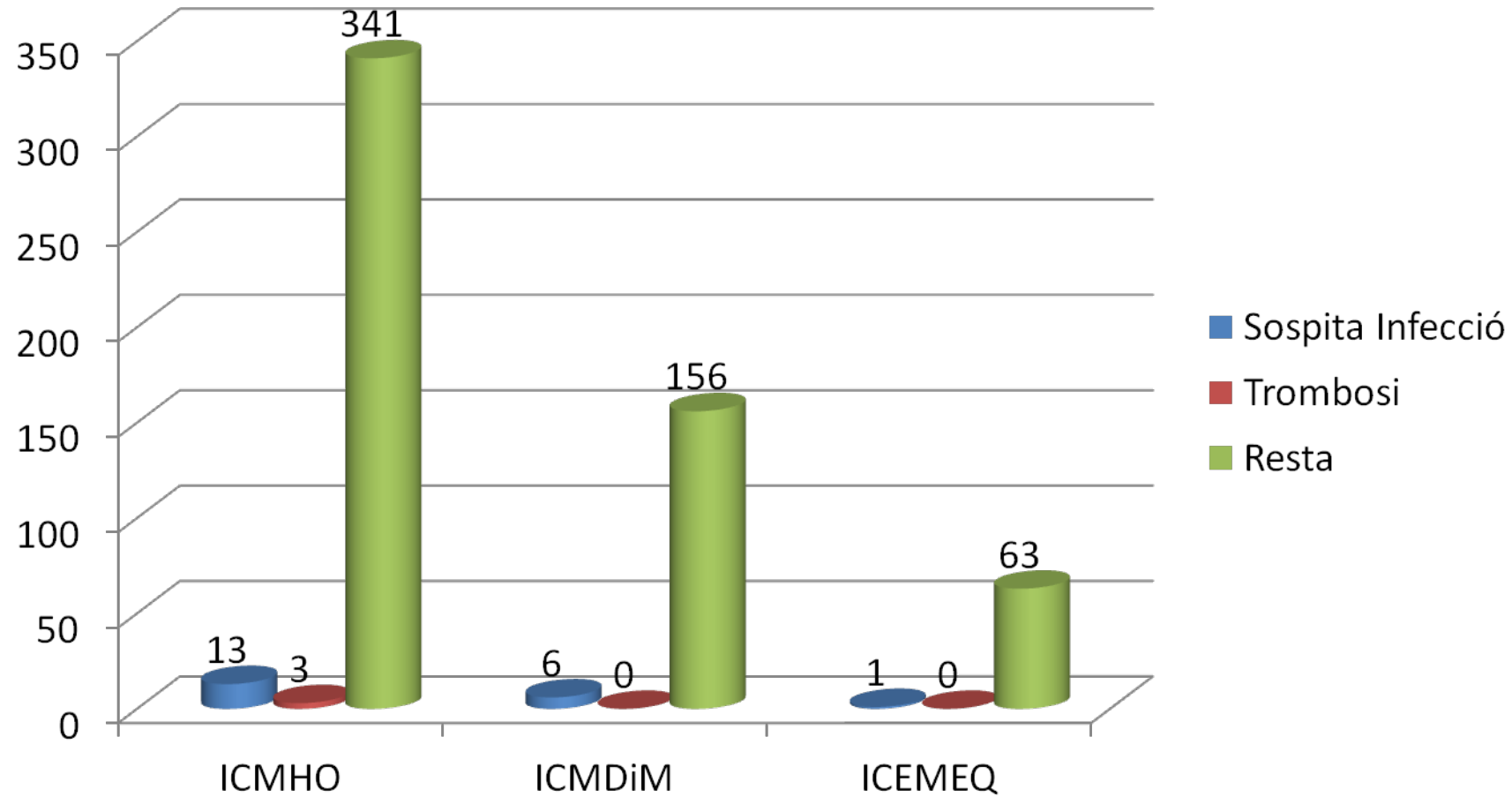
Number of insertions performed by the IV team

| Institutes | At 3 Months | | At 6 Months | |
|------------|-------------|-----|-------------|-----|
| ICMHO | PICC | 167 | PICC | 332 |
| | ML | 6 | ML | 25 |
| ICMDiM | PICC | 46 | PICC | 106 |
| | ML | 24 | ML | 56 |
| ICEMEQ | PICC | 22 | PICC | 30 |
| | ML | 10 | ML | 34 |
| TOTAL AV | | 275 | | 583 |

Specific IV team activities other than PICC placement



Catheter removal: indications



*ICMHO: 6 cultius positius (dos del mateix malalt)

ICMDiM: 1 cultiu positiu

ICEMEQ: 0 cultiu positiu

Case 2

On Friday evening, an allogenic Stem Cell Transplant recipient presents—to the emergency room where she was diagnosed with herpes zoster related to the immunosuppressive therapy



- What would be the benefits to perform an emergency PICC insertion?



- Can you think of at least two reasons why?

Isolation precautions

Prevention of Infection: Transplant

Recommended for Practice

[Adherence to General Infection Control Recommendations](#)

[Antibiotic Prophylaxis in At-Risk Patients](#)

[Antifungal Prophylaxis in At-Risk Patients](#)

[Antiviral Prophylaxis for Select at Risk Patients](#)

[Catheter Care Bundle for Prevention of Central Line Associated Infection \(CLABSI\)](#)

[Chlorhexidine Skin Prep](#)

[Colony-Stimulating Factors Including Biosimilars for At-Risk Patients](#)

[Contact Precautions for Resistant Organisms](#)

[Environmental Interventions](#)

[Hand Hygiene With Alcohol Sanitizer](#)

[Influenza Vaccination](#)

[Pneumococcal and Meningococcal Vaccination](#)



Contact Precautions for Resistant Organisms

PEP Topic: Prevention of Infection: Transplant

Description

Full contact precautions in working with patients with known resistant organisms was studied in patients with and without cancer for its effect on the incidence of resistant organisms in hospital units. Full contact precautions included gowning and gloving. This approach was evaluated in relation to the prevention of infection.

Click on the title for each citation to expand and read the full summary.

<https://www.ons.org/practice-resources/pep>

How do I see this service developing in the future?

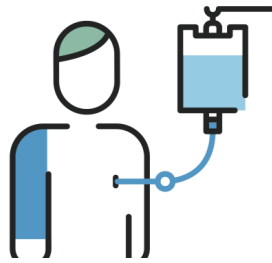


I see them with Advanced Practice Nurse functions

- Educating healthcare personnel involved in care of patients in need of iv therapy
- Improving patients' safety
- Clinical practice experts to adapt devices to patients/treatment requirements
- Consultants
- Researchers and influencers

...recap ...

To get started



- Policies and procedures in place
- Decision tree model
- Patient and caregiver empowerment

Ground preparation

- Monitor, and evaluate care are critical to move ahead
- Lear from mistakes
- Specific training
- Appropriated materials and tools
- Always read and study guidelines



Mandatory

- Combine different fields of experts on patient safety
- The organization willing to support change and founding
- Abandon the generalist model approach
- Educating old and new staff

Thank you!

