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NATIONWIDE STUDY ON THE USE OF ENDOVASCULAR CATHETERS IN INTERNAL MEDICINE DEPARTMENTS

M. GUEMBE[1], MJ. PÉREZ-GRANDA[1], JA. CAPDEVILA[2], J. BARBERÁN[3], B. PINILLA[1], P. MARTÍN-RABADÁN[1], E. BOUZA[1] on behalf of the NUVE Study Group
[1]HOSPITAL GENERAL UNIVERSITARIO GREGORIO MARAÑÓN, [2]HOSPITAL DE MATARÓ, [3]HOSPITAL DE MONTEPRÍNCIPE

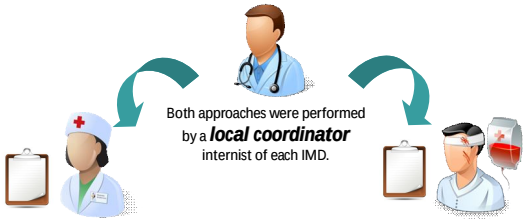
Hospital General Universitario Gregorio Marañón
Doctor Esquerdo 46, 28007
Madrid, Spain +34-915868027
mariaguembe@hotmail.com

INTRODUCTION AND PURPOSE

- Most studies addressing the workload of intravascular (IV) catheter use and the implementation of preventive measures have been carried out mainly in ICUs and involving central catheters.
- Data regarding the use of IV lines and its management outside the ICU are scarce.
- The ***purpose*** of our study was to assess the use and misuse of central and peripheral catheters in Spanish Internal Medicine Departments (IMDs) and to analize the modifiable parameters amenable to internvetnion regarding insertion and maintenance of these devices.

METHODS

- Multi-center study performed in 2013 based on ***two approaches***:



Both approaches were performed by a ***local coordinator*** internist of each IMD.

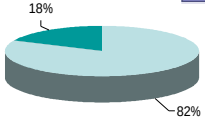
Interview with Head Nurses (HNs) of the IMDs regarding commonly used practices in catheter implantation and care.

Bedside point prevalence multicenter study with all adult patients admitted to IMDs regarding patient condition and IV lines management.

RESULTS

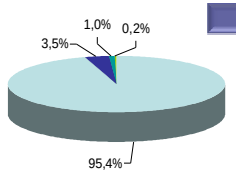
47 academic and non-academic ***IMDs*** agreed to participate.

2,080 Patients



- With at least 1 catheter
- Without catheter

1,826 catheters



- Peripheral
- Non tunneled CVC
- PICC
- Long-term CVC

Individual policies for each IMD on catheter care

Policies of poor compliance on catheter care	%
Daily recorded the need for catheter use	43.2
Skin disinfection with 2% alcoholic chorhexidine	47.7
Connectors' disinfection before its use	61.4
Transparent dressing change every 7 days or when soiled	47.5
Gauze dressing change every 48 h or when soiled	46.2
Administration set change every 96 h or 7 days	13.6
Use of split septum connectors	27.3
No combination of closed connectors with open caps	65.9

General data of the patients

- ✓Median patients' age: 78 years.
- ✓Mean Charlson index: 6.23.
- ✓Signs of sepsis: 87 (**5.2%**) patients.
- ✓Local signs of infection: 89 (**5.2%**) patients.

General data of the catheters

Insertion:

- ✓Registered date of insertion: 83.9%.
- ✓Insertion guided by ultrasound: 1.3%.
- ✓Insertion performed by nurse: 95.1%.

Maintenance:

- ✓Use of transparent dressings: 65.4%.
- ✓Daily record of catheter need: 43.2%.
- ✓Daily monitoring of insertion site: 97.7%.
- ✓No combination of closed connectors with open caps: 71.6%.
- ✓Unnecessary catheters: 19%.

CONCLUSIONS

- ✓***The use of IV lines in Spanish IMDs is high (81.2%).***
- ✓***Daily care and maintenance policies in these departments have opportunities for improvement.***
- ✓***Strategies similar to those applied in ICUs should be implemented in IMDs.***

NUVE Study Group: Hospital General Universitario Gregorio Marañón (Madrid): Jesús Millán, Carlos Pérez de Oteyza, María Torres, Miguel Artacho, Lina Acevedo, Adriana González Mureva, Pablo Dorrego Rodríguez, Antonio Muñiz, Salvador Gómez Quiroga, Jesús García Castaño, Roberto Salcedo Pérez, Belén Andrés del Olmo. Hospital Reina Sofía (Navarra): Fernando Escolar Castellón, Teresa Subiz Olleros, Manuel González Ulzurrum. Hospital Universitario San Juan de Alicante (Alicante): Jaime Moreno Sánchez, Patricia Ruiz Ruiz. Hospital de Tortosa Verde de la Cinta (Cataluña): Domingo Ballesteros, Marcel Cardona Rivera. Complejo Hospitalario de Zamora: Hospital Virgen de la Concha (Zamora): Miguel Arias Pacheco, Cristina Martín Gómez. Hospital Universitario de Móstoles (Madrid): Julián Ruiz Gállego, Javier García Alvarez. Hospital Valdecarros (Castilla): Josep Closas Mestre, Anaclotilde Arteaga. Hospital Joaquín Lores Arnaiz, María del Mar de la Calle de la Vila. Hospital Universitario de Cruces (País Vasco): Marta Alcibar Egaña, Mª Mercedes Arteaga Moreno, Verónica de la Puente López. Fundación Hospital de Alcorcón (Cataluña): Miguel Torres Salinas, Javier Alonso Lázaro. Hospital de Cruces (Cataluña): Pedro Castro Conde, Ayyo Villamil Cajas. Hospital de Jerez (Andalucía): Salvador Pérez Cachón, Luis Rodríguez Fdez. Hospital Universitario de Guadalajara (Castilla-La Mancha): Manuel Rodríguez Zapata, Asunción Cota. Hospital Doctor Peset (Cataluña): Jordi Casademont Pou, Virginia Pomar Gallego. Hospital Universitario Mútua Terrassa (Cataluña): Luis Guerrero, María Asunción Quadrelli Martínez. Hospital "Ernest Lluch" (Cataluña): Luis Guerrero, María Asunción Quadrelli Martínez. Hospital Clínico Universitario de Valladolid (Castilla y León): Antonio Jiménez Zarrugeri, María Julia Bardasano Ayo. Hospital de la Princesa (Madrid): Carmen Gutiérrez Fernández, Ana Sabas Aparicio. Hospital de Manacor (Cataluña): Angela Kelly Benach, Eulalia Bauza, María Delgado Cayuk. Hospital Universitario Arnau de Vilanova (Comunidad Valenciana): Carlos Tormens Eiskbeaten, Mariano Llopis Sanchez. Complejo Asistencial de Zamora: Hospital de Benavente (Castilla y León): Vicente Valverde del Villar Sancho, María del Valle Sánchez. Hospital General Universitario de Elche (Comunidad Valenciana): Antonia Moya Rufete, Cristina Bas Nieto. Hospital del Tajo (Cataluña): Ángela Maqueda Arnella, Rafael Peñalver Cifuentes. Torrevieja: Alicante: Hospital de Palamós (Cataluña): José María de Miguel Yanes, Alicia Sánchez García. Hospital de Palamós (Cataluña): Ángela Maqueda Arnella, Rafael Peñalver Cifuentes. Torrevieja: Alicante: Hospital Nisa Sra. del Prado (Castilla-La Mancha): Fernando Marcos Sánchez, Adolfo Blanco Jarque. Hospital Clínico San Carlos (Madrid): Ignacio Calvo Manuel, Adrián Dávila Montesinos. Hospital Virgen del Castillo (Murcia): Juan Antonio Cestafe Rodríguez, Anita Inesta Berenguer. Ruth Serrano Barroso. Hospital Universitario de Fuenlabrada. (Madrid): Antonio Zapatero García, Manuel Fernández López. Complejo Hospitalario Ciudad Real: Complejo Hospitalario Mancha Centro (Cataluña): Pascual Sevilla Sánchez, Nieves Victoria Recabero. Hospital de Alcañiz (Aragón): Eduardo Aguilar. Comité Marta Salas Alderson, Carmen Figueras Serrano.