

PREVENCIÓN Y CONTROL DE LAS BACTERIEMIAS ASOCIADAS AL USO DE CATÉTERES VENOSOS CENTRALES (CVCs)

Definiciones

Colonización del catéter: crecimiento de > 15 unidades formadora de colonias (UFC) mediante cultivo semicuantitativo o técnica de Maki.

Infección en el punto de inserción: eritema, induración dolorosa o secreción purulenta limitado a 2 cm de la piel y el sitio de inserción del catéter.

Infección del tunel o de la bolsa del reservorio: eritema y necrosis de la piel que recubre el reservorio de un dispositivo totalmente implantable o exudado purulento en la bolsa subcutánea que contiene el reservorio.

Bacteriemia relacionada con el catéter: aislamiento del mismo microorganismo en un cultivo de un segmento del catéter y en hemocultivo (preferiblemente tomado de una vía periférica) de un paciente con síntomas clínicos acompañantes de bacteriemia y sin otro origen aparente de infección. En ausencia de confirmación del laboratorio, la desaparición de la fiebre después de retirar el catéter implicado de un paciente con bacteriemia puede ser considerado como evidencia indirecta de bacteriemia relacionada con el catéter.

Bacteriemia relacionada con la infusión: aislamiento del mismo microorganismo en un cultivo procedente de la infusión y de hemocultivos obtenidos separadamente sin otro origen de infección identificado.

Referencias bibliográficas:

- Pearson ML. Hospital Infection Control Practices Advisory Committee. Guideline for Prevention of Intravascular-device-related Infections. Infection Control and Hospital Epidemiology 1996 July;17(7):438-473.

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Intervenciones

Intervención 1: Seleccionar el tipo del catéter.

Seleccionar el catéter adecuado para el paciente adecuado puede minimizar el riesgo de infección.

- Material del catéter (no hay evidencia):

Referencias bibliográficas:

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- Número de luces:

Recomendaciones ([Grado](#)):

- 1) Usar catéteres de una sola luz, a menos que múltiples luces sean esenciales para el manejo del paciente ([B](#)).
- 2) Si se administra nutrición parenteral, usar un único catéter venoso central o una luz exclusiva para este objetivo ([B](#)).

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- Catéteres tunelizados (Hickman ®) y reservorios (Port-A-Cath ®):

Recomendaciones ([Grado](#)):

- 3) Usar catéteres tunelizados o reservorios en pacientes que precisen accesos vasculares de larga duración (> 30 días) ([B](#))

Referencias bibliográficas:

- Abraham JI, Mullen JI. A prospective study of prolonged central venous access in leukaemia. Journal of the American Medical Association 1982;248:2868-2873.
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- CVCs impregnados de antimicrobianos/antisépticos

Recomendaciones ([Grado](#)):

4) En adultos, considerar el uso de catéteres venoso centrales impregnados de antimicrobianos para los pacientes de alto riesgo ([A](#)).

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Intervenciones

Intervención 2: Seleccionar el el lugar de la inserción del catéter.

Seleccionar el mejor lugar de inserción para el paciente puede minimizar el riesgo de infección

- Subclavia, yugular y femoral:

Recomendaciones (Grado):

5) Al seleccionar un lugar apropiado de inserción, hay que valorar el riesgo de infección frente al riesgo de complicaciones mecánicas (C).

6) Preferiblemente, usar la subclavia mejor que la yugular o femoral para catéteres no tunelizados, a menos que esté contraindicado medicamente (B).

7) Considerar el uso de catéteres insertados periféricamente como una alternativa a la cateterización de la subclavia o yugular (B).

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Intervenciones

Intervención 3: Precauciones de barrera durante la inserción del catéter.

Extremar las precauciones de barrera durante la inserción reducirá el riesgo de infección.

Recomendaciones ([Grado](#)):

8) Usar una técnica estéril, incluyendo gorro y guantes estériles, mascarilla y paños estériles en la inserción de catéteres venosos centrales ([B](#))

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Intervenciones

Intervención 4: Antisepsia cutánea.

Una preparación adecuada del lugar de la inserción reducirá el riesgo de infección relacionada con el catéter.

Recomendaciones ([Grado](#)):

9) Limpiar la piel del lugar de inserción con solución acuosa de gluconato de clorhexidina al 2%. Utilizar povidona yodada al 10% en pacientes con historia de sensibilización a la clorhexidina. Dejar que el antiséptico se seque antes de insertar el catéter ([B](#)).

10) No aplicar disolventes orgánicos (acetona) en la piel antes de la inserción ([C](#)).

11) No aplicar pomadas antimicrobianas en el lugar en el que se va a insertar el catéter ([B](#)).

Referencias bibliográficas:

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Intervenciones

Intervención 5. Cuidados del catéter y del sitio de inserción.

Las infecciones pueden ser minimizadas con buenos cuidados del catéter y del sitio de inserción:

- Las conexiones son frecuentes origen de infección.

Recomendaciones ([Grado](#)):

12) Desinfectar las conexiones con solución acuosa de gluconato de clorhexidina o povidona yodada antes de acceder al sistema ([C](#)).

Referencias bibliográficas:

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- Elegir un apósito adecuado para el lugar de inserción del CVC minimiza la infección.

Recomendaciones ([Grado](#)):

- 13) Usar gasa estéril o apósito trasparente para cubrir el sitio de inserción del catéter (B).
- 14) Sustituir el apósito cuando el CVC es retirado, cuando el apósito esté húmedo, despegado o manchado, o cuando la inspección del lugar de la inserción es necesaria (C).
- 15) No aplicar pomada antimicrobiana en el lugar de la inserción como parte de los cuidados (B).

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- Prevenir la trombosis del catéter y mantener el catéter permeable minimizará las oportunidades de infección.

Recomendaciones ([Grado](#)):

- 16) Realizar lavados de los catéteres venosos centrales con un anticoagulante. Los catéteres Groshong® pueden no requerir lavados rutinarios con anticoagulantes (B).

Referencias bibliográficas:

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PREVENCIÓN Y CONTROL DE LAS BACTERIEMIAS ASOCIADAS AL USO DE CATÉTERES VENOSOS CENTRALES (CVCs)

Intervenciones

Intervención 6: Retirada de catéteres.

Cuando y como los CVCs son retirados puede influir en el riesgo de infección.

- Frecuencia y métodos:

Recomendaciones ([Grado](#)):

17) No retirar de forma sistemática los CVCs no tunelizados como forma de prevenir las infecciones relacionadas con el catéter ([B](#)).

18) Utilizar una guía (mandril) de intercambio para retirar un catéter que funciona mal, o para sustituir un catéter existente si no hay evidencia de infección (A).

19) Si se sospecha infección relacionada con el catéter, pero no hay evidencia de infección local en el sitio de inserción (secreción purulenta, eritema, dolor):

- Retirar el catéter existente e insertar uno nuevo bajo una guía.
- Enviar el catéter retirado para cultivo semicuantitativo o cuantitativo.
- Dejar el catéter insertado nuevamente en el lugar si el cultivo resulta negativo. Si el cultivo indica colonización o infección, retirar el catéter insertado nuevo, e insertar un catéter nuevo en un lugar diferente.

(A)

20) Como alternativa a lo descrito arriba, para determinar si hay infección relacionada al catéter usar un método que no requiera retirar el catéter. Un resultado negativo permitiría la inserción de un nuevo catéter sobre una guía. (C)

21) No usar una guía (mandril) de intercambio de catéter en pacientes con infección relacionada con el catéter. Si se requiere acceso vascular retirar el catéter implicado, y sustituirlo con otro catéter en un sitio diferente de inserción. (A)

Referencias bibliográficas:

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- Farr BM. Accuracy and cost-effectiveness of new tests for diagnoses of catheter-related bloodstream infections. Lancet 1999;354: 1487-8. [\[Abstract\]](#)

- Cambiar los equipos de infusión adecuadamente:

Recomendaciones ([Grado](#)):

22) Cambiar el equipo de infusión cuando el dispositivo vascular es retirado. (C)

23) Cambiar el equipo de infusión, incluyendo alargaderas y llaves de paso, con una frecuencia no mayor de 72 horas, a menos que esté clínicamente indicado. (A)

24) Cambiar los equipos utilizados para administrar sangre, productos sanguíneos o lípidos dentro de las 24 horas de iniciada la infusión. (C)

Referencias bibliográficas:

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Intervenciones

Intervención 7: Profilaxis antibiótica.

La profilaxis antibiótica no es necesaria.

Recomendaciones ([Grado](#)):

25) No administrar antimicrobianos antes de la inserción o durante el uso de un catéter venoso central para prevenir la colonización bacteriana o bacteriemia. (B)

Referencias bibliográficas:

- Bock SN, Lee RE, Fisher B, Rubin JT, Schwartzentruber DJ, Wei JP et al. A prospective randomised trial evaluating prophylactic antibiotics to prevent triple-lumen catheter-related sepsis in patients treated with immunotherapy. *Journal of Clinical Oncology* 1990;8:161-169. [\[Abstract\]](#)
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