

Methodological issues in HAICU protocol: discrepancies between HAICU and HAIPPS protocol

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CVC: definition of CDC (as in PPS)

- **3.6.1 Central vascular catheter**

- A central vascular catheter (or central line) is an intravascular catheter that terminates at, or close to, the heart or in one of the great vessels, which is used for infusion, withdrawal of blood or hemodynamic monitoring.
- great vessels for the purpose of reporting central-line BSI and counting central-line days in the NHSN system: aorta, pulmonary artery, superior vena cava, inferior vena cava, brachiocephalic veins, internal jugular veins, subclavian veins, external iliac veins, common iliac veins, common femoral veins,

- **Notes:**

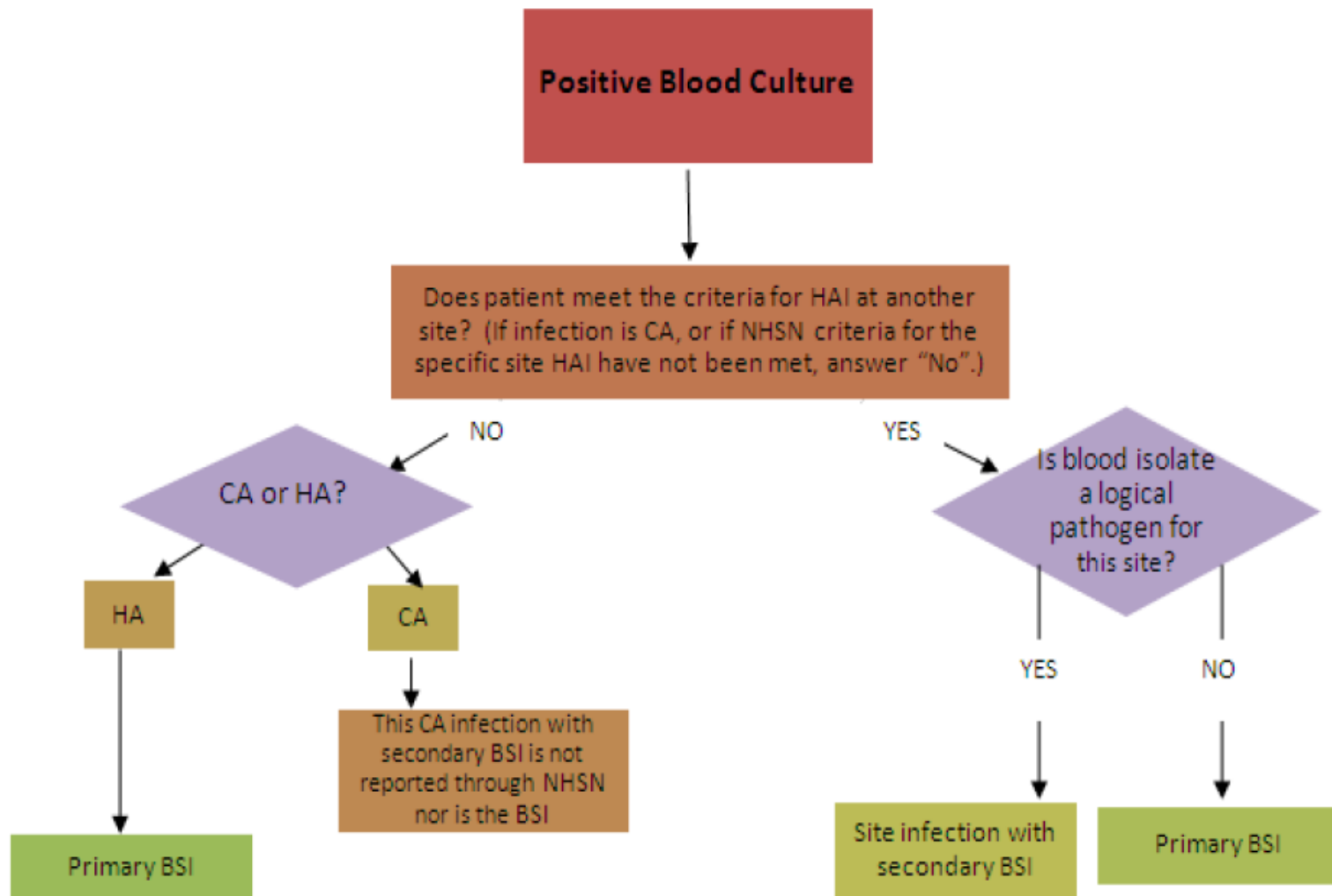
- Neither the insertion site nor the type of device may be used to determine if a line qualifies as a central line.
- The device must terminate in one of these vessels or in or near the heart to qualify as a central line.
- An introducer is considered an intravascular catheter.
- Pacemaker wires and other non-lumened devices excluded

Following...

- **Temporary central line included**
 - A non-tunneled catheter.
- **Permanent central line includes**
 - tunneled catheters, including certain dialysis catheters; and
 - implanted catheters (including ports).
 - Not included in several countries
 - Relevance ? Other catheter in the same time
 - Stratification on the number of catheter ?
- **NB : arterial lines are excluded**

CDC

- NOTE: Neither the insertion site nor the type of device may be used to determine if a line qualifies as a central line. The device must terminate in one of these vessels or in or near the heart to qualify as a central line.
- NOTE: Pacemaker wires and other non lumened devices inserted into central blood vessels or the heart are not considered central lines, because fluids are not infused, pushed, nor withdrawn through such devices.
- NOTE: An introducer is considered an intravascular catheter, and depending on the location of its tip, may be a central line.
- NOTE: Intraaortic balloon pumps (IABP) are not considered central lines because they are not generally used for infusion or withdrawal of blood, but are used instead for therapeutic purposes. Neither are lines used for extracorporeal membrane oxygenation (ECMO).



Legend

BSI= bloodstream infection
CA= Community acquired
HA= Healthcare associated
HAI= healthcare-associated infection

Case definitions for ICU-acquired same as HAI in PPS ?

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- an invasive device was placed on day 1 or day 2 resulting in an HAI before day 3 (PPS document)
- CDC : no duration time requirement
- ICU : > 2 days

Options :

No change ?

Do you consider it an important matter ?

How many infections do we miss ?

Do you consider it important for reproducibility ?

Second infection episode

- To consider an infection as a new infection episode, the combination of

- 1) new signs and symptoms and

- 2) radiographic evidence (for pneumonia) or other diagnostic testing is required

After clinical resolution (duration of 48 hrs) and

- Same bacteria: 2 weeks between the 2 samples
- No cut off if a different microorganism

Is this infection device-associated ?

- ? : intubation starting on day of onset PN => IAP?
Or ventilation=treatment of PN?
- Case history 1
 - Trauma patient with coma.
 - History of aspiration (visualized by emergency team)
 - Intubation on the spot
 - D2 : pneumonia (Xray, clinical symptoms)
 - Intubation associated pneumonia or ventilation part of the treatment of PN ?

- Case history 2 :
 - COPD exacerbation in the Pulmonary department
 - Despite NIV, deteriorating clinically
 - Transfert to ICU, intubation at admission
 - D1 : Chest Xray : no new findings
 - D3 : new infiltrate visible on Xray, sampling and start of a new AM treatment
 - IAP ?

- Case history 3
 - Stroke
 - Admission in ICU, not intubated
 - D5 : new infiltrate, purulent sputum and fever. Deteriorating blood gases. Intubation
 - Pneumonia : YES
 - VAP or not ?
 - Delay between intubation and pneumonia.

- Case history 4
 - Postoperative
 - Extubation day 5
 - Pneumonia day 7

VAP or not (no matter if the patient is reintubated or not)

Device inserted (placed) in ICU OR outside ICU ?

- Case history
 - Patient with a peritonitis, operated 2 days before admission in ICU, placement of a CVC in the operating room
 - On day 2 after surgical procedure, post-operative peritonitis (anastomosis leakage)
 - Admission in ICU
 - Day 5 of ICU : fever, positive blood cultures, ablation of CVC : positive in culture, same microorganism than BC.
 - Classification ?
 - How to count catheter days ? 7 or 5 ?

Simplify criterion 3 for PNEU

- Other alternative methods including those developed for viruses or specific pathogen agents (positive detection of viral AG or AB, seroconversion, PCR etc...) and that have been validated through studies with a high level of scientific evidence.

Projects ?

- Case stories for evaluation and teaching
 - Comparison Infection Control team vs Intensivists
- Survey on the feeling of Intensivists about antimicrobial resistance (with ESICM)

Rapid communications

EXPERIENCE OF EUROPEAN INTENSIVE CARE PHYSICIANS WITH INFECTIONS DUE TO ANTIBIOTIC-RESISTANT BACTERIA, 2009

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Conclusions

- Be clever !!!!!!!!!!!!! (Alain)
- Be simple ?????????? (Anne)
- Be right ?!?!?!?! (Mercedes)