

Supplementary materials

Central Line Insertion Site Assessment (CLISA) Score			
Score	Category	Description	Action
0	Normal Appearance	- Skin is flesh-colored - No erythema, localized swelling, or drainage	Continue serial assessments
1	Minimal Erythema	- Insertion site erythema < 3 mm radius (< 1 catheter width) - Drainage/crusting scant, non-cloudy if present* - No localized swelling at insertion site	RN: Verbal communication with next shift RN MD: Acknowledge RN assessment in progress note
2	Advancing Erythema	- Insertion site erythema 3-6 mm radius (1-2 catheter widths) or worsening within 24 hours - Localized swelling at insertion site may be - Drainage/crusting is non-cloudy, if present*	RN: Verbal notification to MD MD: Strongly consider line removal. If not removed, document reason and plan
3	Severe Erythema OR Purulence	- Purulent (cloudy) drainage/crusting OR - Erythema >6mm (>2 catheter widths), or rapid worsening in size/brightness - Focal swelling (common, not required)** - Erythema not required if purulence present	RN: Page MD MD: Order immediate line removal. If cannot remove today, document plan to remove
NV	Insertion site not visible	Assessment not possible due to obscured insertion site. Skin that is visible appears normal.	Document "not visible"

*Bleeding without erythema excluded.

**Specifically related to insertion site. Not intended to refer to anasarca or limb swelling.

Appendix 1. Pictures of used scale CLISA

Adopted from Gohil et al. (2020)

V.I.P. score (Visual Infusion Phlebitis Score)		
0- the insertion site appears healthy and there are no signs of phlebitis	0	Only continued observation of the cannula is indicated.
1- one of the following signs is evident: slight pain or slight redness near IV insertion site. These are possible early signs of phlebitis	1	Necessary to continue with the monitoring.
2- two of the following signs are evident: pain at IV site, redness or swelling. This is the early stage of phlebitis	2	Requiring repositioning of the peripheral venous catheter.
3- all of the following signs are evident: pain along the path of the cannula, redness around the insertion site and swelling.	3	Medium stage of phlebitis The catheter should be repositioned and treatment considered.
4- all of the following signs are evident,extensive: pain along the path of the cannula, redness around the insertion, swelling, palpable venous cord.	4	Advanced stage of phlebitis or at the start of thrombophlebitis. It is recommended to reposition the catheter and consider treatment
5- all of the following signs are evident ,extensive: pain along the path of the cannula, redness around the site, swelling, palpable venous cord, pyrexia.	5	We are in the stage of advanced thrombophlebitis Requires initiating treatment and repositioning the peripheral venous catheter.

Appendix 2. Picture of used scale VIP

Adopted from Jackson (1998)