

## Journées annuelles 15/06/22

#### Bains, baignades et cathéters centraux

Groupe de travail : protocoles de soins partagés

Dominique Guimber

### En pratique en France : Que recommandons nous pour protéger le CVC pendant la douche, le bain ou la baignade ?

- Quel type de baignade ?
- Combien de temps après la pose du CVC ? 30 j ?
- Age minimum? Nourrisson< 1 ans?</li>
- Quel type de protection ?
- Changer le pansement immédiatement après la sortie de l'eau ?
- Risque d'infection et d'épidémie après la baignade ? Décrit dans la littérature













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Table 4. Survey of Swimming Practices Among Home Parenteral Nutrition Programs in the United States

HPN Program	Do You Allow Your Patients to Swim With a CVC?	Bodies of Water Allowed	Dressing/PICC Line Covers	Other Rules
A	Tunneled catheters > 2 months postplacement Unaccessed ports	Ocean, pool	Transparent dressing over catheter Ports: needle must be out for 4 hours prior to swimming	Clean site and change dressing immediately after water activity
В	Only mediports	Any	No particular dressing	Stantification of V
C	Only deaccessed ports	Any	No	
D	Hickman catheter: cannot swim for the first 3 weeks or until tissue adherence to the cuff can be ensured Ports: once pocket is healed	Ocean, pool, private hot tub	Catheter coiled up + Tegaderm covering the entire dressing	After swimming, remove Tegaderm and perform site care with ChloraPrep, gauze, and tape Cuffed PICC use AquaGuard
	and not accessed No PICC unless cuffed			•
E	Unaccessed ports Cuffed PICCs ≥ 6 months postplacement	Ocean, pool	Waterproof tape	Clean site after swimming
F	No information (situation has not come up)			
G	PICCs: no swimming Hickman: yes, once catheter in place > 1 months Port: unaccessed > 1 months postplacement	Chlorinated pool only	Hickman: standard dressing	Hickman: change dressing immediately after swimming
Н	Yes: Broviac Hickman Medicomp Once exit site is healed	Pool		Change dressing immediately after ad clean the outside of the catheter with chlorhexidine
I	Babies: no Some older patients do swim	Chlorinated pools	Cover and protect the whole Broviac with another dressing that would encompass the whole original dressing + catheter	Change the central line dressing immediately after swimming
			Have used AquaGuard in the past	
J	Minimum swimming (usually only special occasions)	Private backyard swimming pools They can splash around in other bodies of water	AquaGuard or large Tegaderm	Lines need to be in for at least 6 weeks prior to swimming Dressing is changed as soon as the child is done swimming If the patient begins to have site infections the privilege is lost
K	Only deaccessed ports			.00
L .	Tunneled CVAD Deaccessed ports	Chlorinated pools only	A watertight dressing should be worn over the catheter exit site while swimming. If the dressing comes off or if there is moisture present beneath the dressing the patient should cleanse the site and apply a new dressing immediately after swimming. It is also important to cover the end connector and the connection between the catheter hub and the end connector. This is a potential point of entry into the catheter lumen itself	
			and should also be secured with a	*
M	No swimming		watertight covering.	
N	No swimming			
0	Yes	Pools only	Catheter coiled up + large Tegaderm	
P	No swimming			

Going With the Flow or Swimming Against the Tide: Should Children With Central Venous Catheters, Swim?

Niller J, et al. Nutr Clin Pract. 2014;29:97-109

#### **Conclusion:**

The decision to allow children with CVCs to go swimming is one wrought with mixed messages and little evidence. Unfortunately, due to the limited information available, a firm recommendation cannot be made. Recreational water associated outbreaks are well documented in the general public as is the presence of human pathogens even in chlorinated swimming pools. As a medical team, practitioners can provide information regarding the potential risk, but ultimately the decision lies with the parents. Due to our experience with a fatal event immediately after swimming, we continue to strongly discourage patients with CVCs from swimming. Moreover, if the parents decide engaging in this popular pastime is still worth the risk, they are encouraged to ensure proper line/site maintenance and to use products that are specifically designed for this use that may mitigate **infection risk**. Further studies regarding the risk of swimming with a CVC are needed to make a strong, evidence-based recommendation

#### **GÉNÉRALITÉS ET MATÉRIEL**

R50). Ainsi, la douche est autorisée en l'absence de perfusion sous réserve d'une protection imperméable (AF). S'il y a douche ou exposition à l'eau, le pansement (quel que soit son type) est protégé avec un matériau imperméable et son intégrité est vérifiée avant et après (AF CCI-R50). La toilette quotidienne du patient doit inclure le bras porteur du PICC (AF).

#### **Recreational Swimming**

Swimming introduces an incompletely defined but potentially severe risk to those requiring chronic central venous access. Contamination of various chlorine-treated (swimming pools), stagnant (lakes and ponds), and flowing (oceans and rivers) bodies of water with human pathogens has been well documented, though proper maintenance may minimize outbreaks. The potentially fatal risk of such contaminants gaining access to central circulation via the CVC is unclear, but many IRP readily share anecdotes of infection from organisms such as Pseudomonas aeruginosa. Drysuits specifically designed for patients with CVC are available, but at substantial cost and have not been studied. Parents seeking guidance are confronted by mixed messaging from support programs, online resources and blogs, and even IRP. These conflicting recommendations and practices reflect the paucity of data to guide a safe and clear approach for swimming with a central line. A recent survey of 16 pediatric home PN programs found inconsistency of recommendations, ranging from strict swimming avoidance to permission for ocean swimming (46). All programs permitting swimming in low-risk situations recommended immediate site cleaning and dressing change following water exposure and avoidance of submersion for 4-6 weeks after CVC placement. Ultimately, the decision to permit children with IF to swim lies with the parent or guardian.

Management of Central Venous Access in Children With Intestinal Failure: A Position Paper From the NASPGHAN Intestinal Rehabilitation Special Interest Group

> \*Danielle Wendel, †Ethan A. Mezoff, ‡Vikram K. Raghu, §Sivan Kinberg, "Jason Soden, ¶Yaron Avitzur, ‡Jeffrey A. Rudolph, †Michelle Gniadek, #Valeria C. Cohran, \*\*Robert S. Venick, and ††Conrad R. Cole

(JPGN 2021;72: 474-486)

increased risk. Recreational swimming including submerging the well healed tunneled CVC in water would be a welcome activity, however, according to a recent review which aimed to evaluate the risk of catheter-related infections after swimming, the existing evidence is of low quality and cannot support a recommendation that swimming with tunneled CVC is safe [177] (LoE 3). In the same article, the authors investigated the current practice of home PN programs in the United States. Only 3/16 home PN programs that responded to the survey did not allow swimming of any sort. The others differed with respect to allowing swimming in the ocean and private pools only, or including hot tubs, etc. Instructions on the procedures to be followed before and after swimming were also inconsistent; most recommended the use of a transparent dressing to cover the whole catheter during swimming, and immediately after swimming to clean the site and to change the dressing [177] (LoE 3).

ESPGHAN/ESPEN/ESPR guidelines on pediatric parenteral nutrition: Venous access

S. Kolaček <sup>a, \*</sup>, J.W.L. Puntis <sup>b</sup>, I. Hojsak <sup>c</sup>, the ESPGHAN/ESPEN/ESPR/CSPEN working group on pediatric parenteral nutrition <sup>1</sup>

R 10.43 Children with well-healed tunneled catheters may be allowed to swim, provided that a water resistant dressing is used to cover the whole catheter. Immediately after swimming the catheter exit site should be cleaned and disinfected, and the dressing changed (GPP, conditional recommendation for, strong consensus)

# Comment protégez-vous le cathéter veineux central qui risque d'être mouillé ou lors de l'immersion ?

- Questionnaire (google form) développé par le groupe de travail « protocoles de soins partagés des MaRDis\_»
- https://docs.google.com/forms/d/e/1FAIpQLSdzqcf-j3GIquvle2VdUuie3- 6RHzefMomuG1IP1n1hLSkTQ/viewform?usp=pp\_url

2.1 Qui conseille le choix du pansement ? *
Médecin
infirmier (e)
Diététicien (e)
Autre
Personne
2.2 Si "autre" à la question précédente (qui conseille le choix du pansement) veuillez préciser ici :
Votre réponse
Votre réponse
3. Autorisez-vous les patients en NPAD à mouiller leur CVC ? ( se laver, nageretc ?)  Si oul , vous répondez aux questions suivantes, si non vous allez arrêter de répondre au questionnaire ( partie commentaire)
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