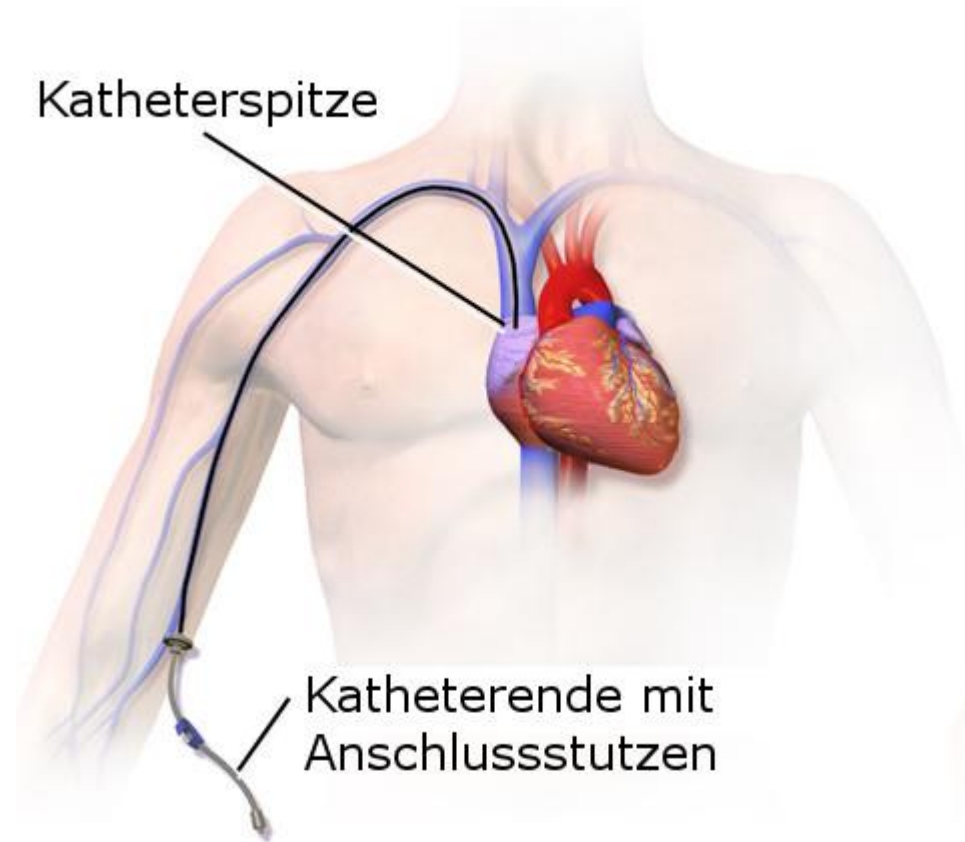


PICC im klinischen Alltag

Martin Ringer, MScN, RN

PICC



- **Peripherally inserted central catheter**
- Einlageort: V. cephalica, V. brachialis,..
- Übergang Vena cava superior – rechter Vorhof
- Individuelle Länge

Fallvorstellung

Junger Mann

BK 6/6 positiv, Sepsis

Pulmonalklappenendokarditis

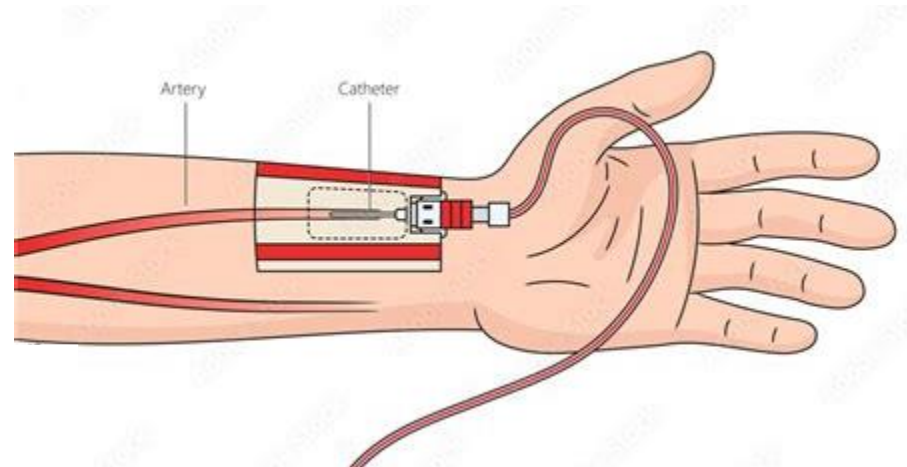
Antiinfektive Therapie mit Augmentin

IMCU: 2 PVK + 1 Arterienkatheter

Heparin kontinuierlich iv

Flucloxacillin iv alle 4h

Therapiedauer mind. 6 Wochen



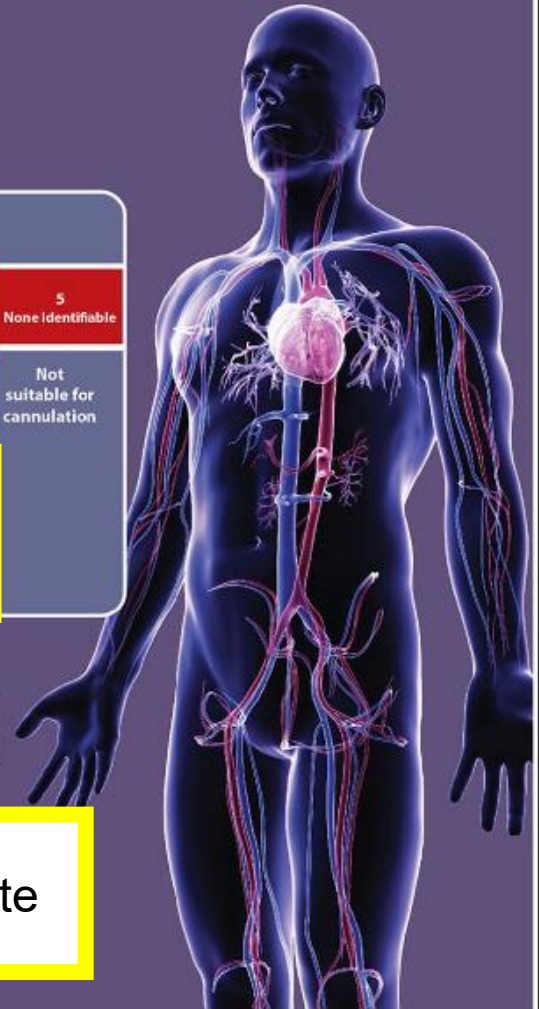
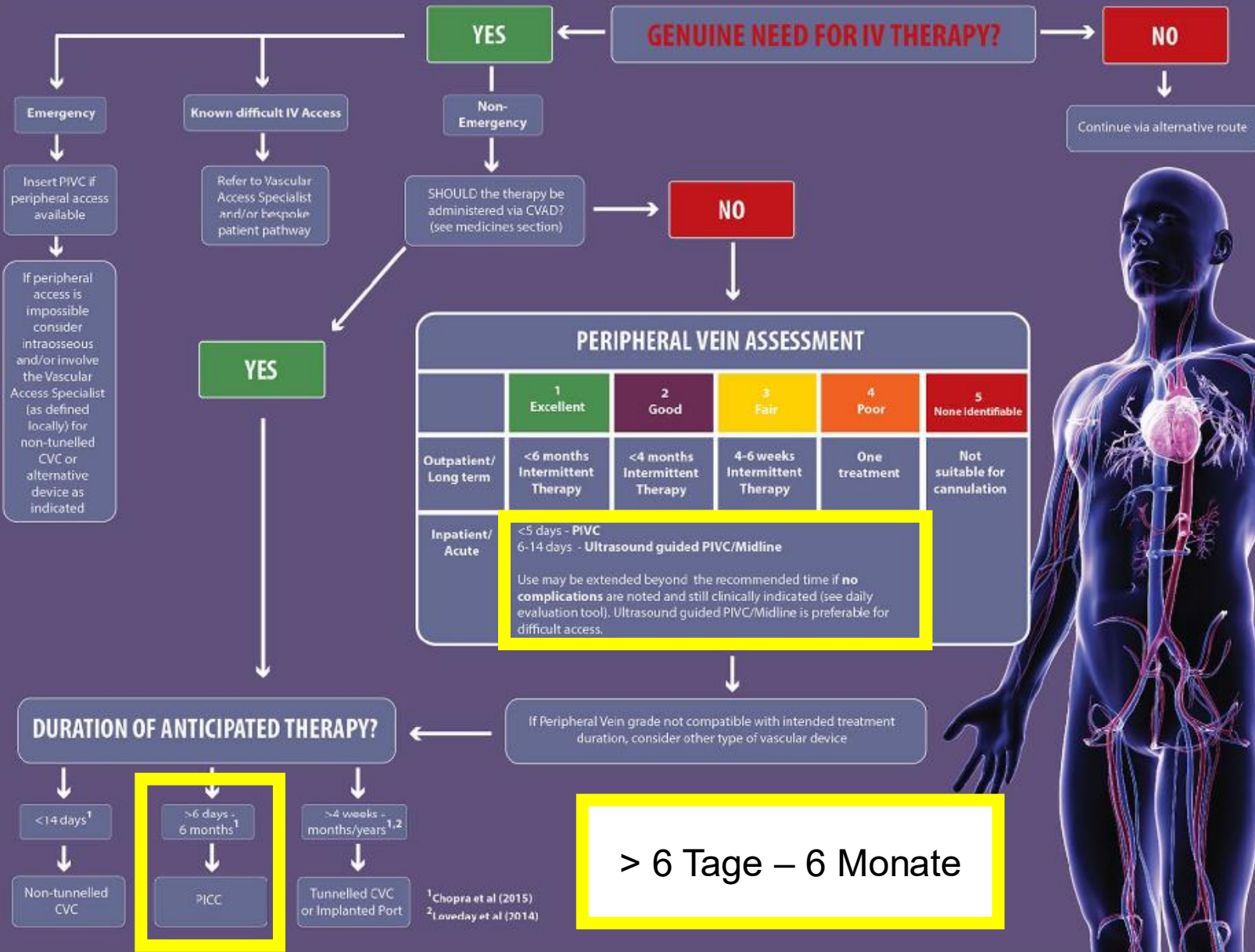
Fallvorstellung



Was ist auf der Abteilung passiert?

1. Weiter mit PVK
(peripherer Venenkatheter)
2. Einlage Midline
3. Einlage ZVK
(Zentralvenöser Katheter)
4. Einlage doppelumiger PICC
5. Einlage Port a cath

RIGHT LINE DECISION TOOL



¹Chopra et al (2015)
²Loveday et al (2014)

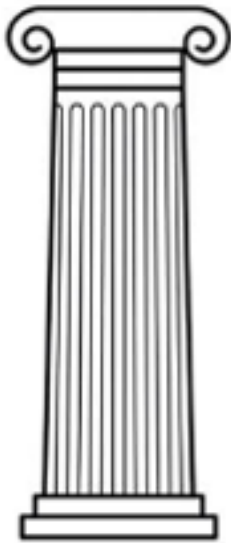
Katheterwahl im Klinikalltag

Evidenz - Eminenz?!

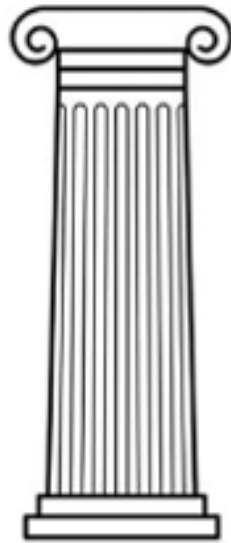


Advantages

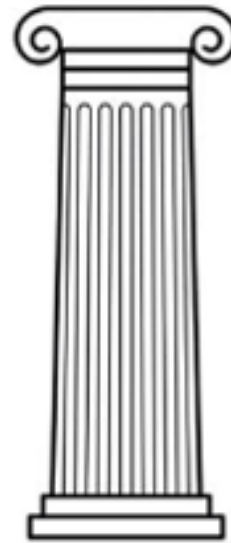
Vorteile PICC



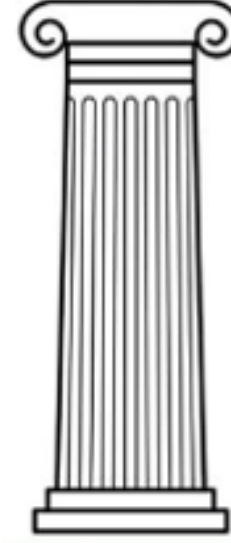
Etabliert



Rasch

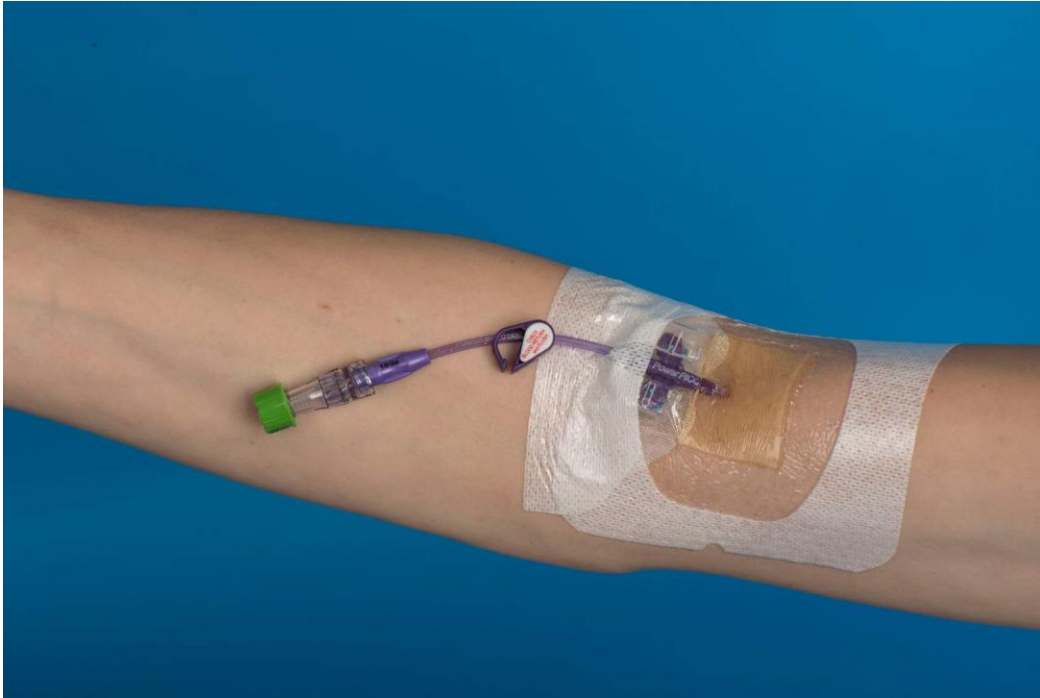


Risikoarm

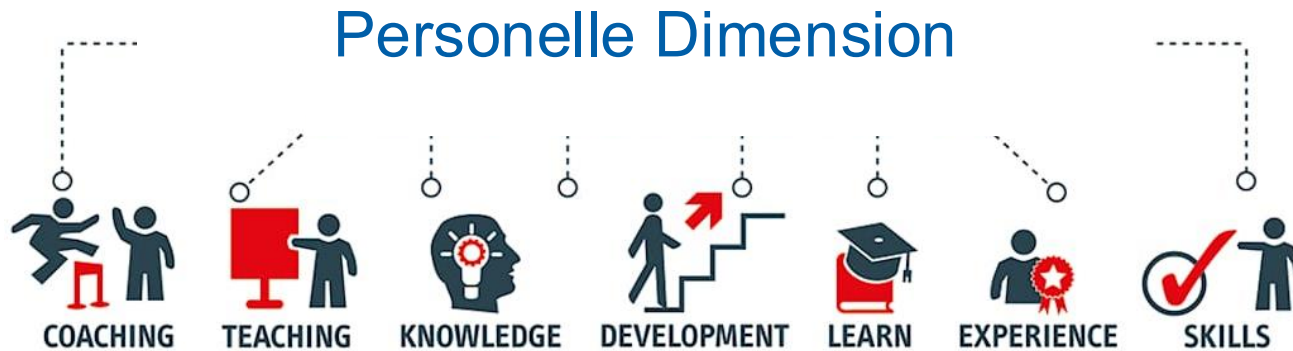


Ambulant

Erfahrungen und Erlebnisse



Herausforderungen im Alltag



Systemische Dimension



Maintenance – Theorie und Praxis

Qualifikation und Expertise

- Ausreichende Ressourcen sollten für eine angemessene Aus- und Weiterbildung zur Verfügung gestellt werden. *Buetti, N. et al. (2022).*
- Die Komplikationsrate ist signifikant tiefer, bei adäquater Weiterbildung. *Paras-Bravo, P. et al. (2016).*

Standardisierung

- Empfehlung für die Verwendung von aktuellen wissenschaftlichen Leitlinien (Evidence Based). *Paras-Bravo, P. et al. (2016).*
- Ausreichend Personal für die Infektionsprävention. *Buetti, N. et al. (2022).*
- Verbesserte Outcomes durch Vascular Access Teams. *Vilao, A. et al. (2024).*

Maintenance – Theorie und Praxis

Edukation von Patientinnen

- Erhöhte Zufriedenheit. *Vilao, A. et al. (2024), Malale, K. et al. (2020).*
- Geringeres Auftreten von Katheter assoziierten Komplikationen, erkennen Warnzeichen frühzeitig. *Vilao, A. et al. (2024).*

Erfahrungen Patientinnen ambulant

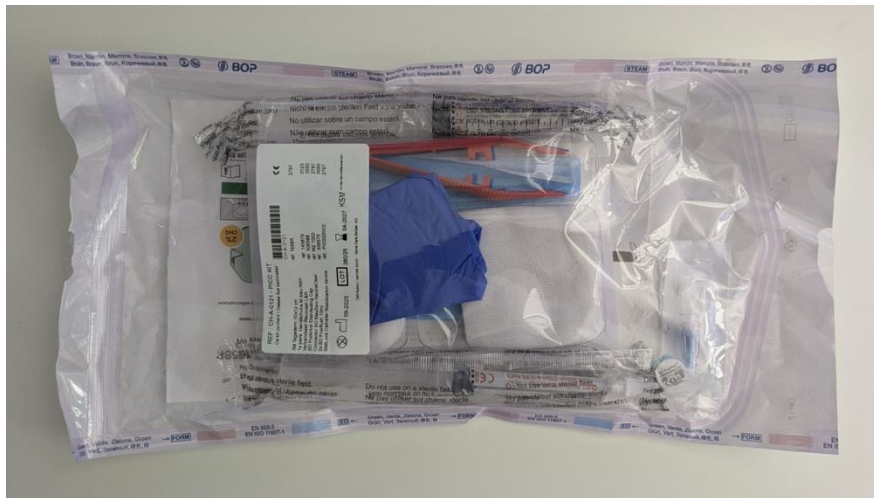
- Unklar und lückenhaft
- Besseres Monitoring (PROMS) notwendig und
- mehr Unterstützung für sichere und patientenzentrierte Pflege *Krein, S. et al. (2019).*



Maintenance – Theorie und Praxis

Expertise bilden

- Weiterbildungsangebote öffnen / Kompetenzzentrum
- e-learning
- Kongress



Prozesse standardisieren

- Materialpaket
- Care & Case Management

Maintenance – Theorie und Praxis

Kontinuität in Pflege & Betreuung OPAT als Erfolgsmodell



Results 33 patients participated in the study. Univariate analysis revealed substantial improvement in three of the four SF-36 domains. Specifically, participants reported improvements in the mean SF-36 score (95% CI) from interviews 1 to 2 for 'emotional role' (24.2 (5.0–43.5)), 'social functioning' (22.0 (95%CI 10.8 to 33.2)) and 'emotional well-being' (11.9 (95%CI 5.6 to 18.2)). Furthermore, 97% of patients would recommend OPAT to others.

Burch, A. et al. (2024).

Auswirkungen



Morbidität &
Mortalität

Hospital-
isation

Kosten

Belastung
Patientin

PICC in Verruf, zurecht?

Received: 22 January 2023 | Revised: 22 April 2023 | Accepted: 27 April 2023

DOI: 10.1002/ijc.34612

RESEARCH ARTICLE

Cancer Therapy and Prevention



Complication rates of peripherally inserted central catheters vs implanted ports in patients receiving systemic anticancer therapy: A retrospective cohort study

Max J. Rieger¹ | Xenia Schenkel¹ | Ivona Dedic¹ | Tadeusz Brunn² |
Ralph Gnannt³ | Michael Hofmann⁴ | Olivier de Rougemont⁵ |
Sebastian M. Stolz¹ | Wiebke Rösler¹ | Jan-Dirk Studt¹ | Stefan Balabanov¹ |
Andreas Wicki¹ | Anja Lorch¹ | Markus G. Manz¹ | Rahel Schwotzer¹

¹Department of Medical Oncology and Hematology, University Hospital Zurich, Zurich, Switzerland

Abstract

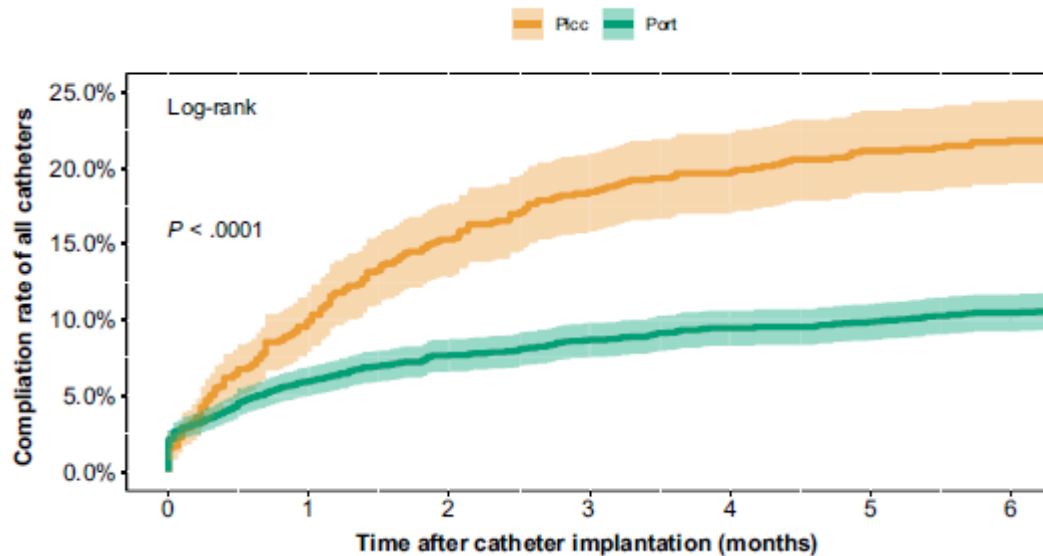
While implanted port catheters (“PORTs”) have historically been the standard device

a major catheter-related complication with a higher rate in PICCs than in PORTs (23.5% vs 14.9%, $P < .001$). Among major complications, infections and mechanical complications were more common in PICCs than in PORTs (11.9% vs 6.4%, $P = .001$, 7.3% vs 4.2%, $P = .002$), whereas the rate of thrombosis was similar (3.4% vs 3.0%, $P = .9$). While PORTs had a higher rate of periprocedural complications (2.7% vs 1.1%, $P < .05$), PICCs overall complication rate exceeded PORTs within 3 days from implantation. Median follow-up was 49 (PICC) and 60 weeks (PORT). **PORTs are safer and therefore should be preferred in this setting regardless of catheter dwell time.**

- Auswertung KISIM über 20 Jahre (2001 – 2021)
- 3365 Patientinnen (890 PICC, 2475 Port)

Komplikationsrate
PICC 23,5% vs
Port 14,9%
→ **Signifikant**

PICC in Verruf, zurecht?



Port
höhere Komplikationsrate
zu Beginn

PICC
> 3 Wochen Verweildauer
mehr Komplikationen

PICC mit kurzer Verweildauer < 6 – 8 Wochen keine vergleichbaren Komplikationsraten!

Mögliche Ursachen




- Mehr hämatologische Patientinnen mit PICC
- Katheterwahl abhängig von Präferenz und Verfügbarkeit Arzt
- PICC Entfernung schlecht dokumentiert

PICC und häm/onkonlogische Patientinnen



Article

Peripherally Inserted Central Venous Catheter (PICC) Related Bloodstream Infection in Cancer Patients Treated with Chemotherapy Compared with Noncancer Patients: A Propensity-Score-Matched Analysis

Romarc Larcher ^{1,2,*}, Koko Barrigah-Benissan ^{3,4}, Jerome Ory ^{3,4}, Claire Simon ⁵, Jean-Paul Beregi ⁶, Jean-Philippe Lavigne ^{3,4} and Albert Sotto ^{2,3}

Patientinnen mit Chemotherapie haben ein erhöhtes Risiko für CLABSI, nicht signifikant

Auswahl Gefäßzugang

- Individualisiert
- Patientenpräferenz
- Evidenz based
- Institutionelle Rahmenbedingungen *Major, A. et al. (2025)*

Auflösung Fallvignette



Abteilung

- Heparin iv
- Flucloaxicillin iv alle 4h

Blutkulturen negativ

OPAT für ~ 3 Wochen,
Instruktion self administration
1x Woche Kontrolle
OPAT Pflegesprechstunde +
Kardiologie USZ



Auflösung Fallvignette

Easypump® II LT 270

- Kontinuierliche Verabreichung (24 Stunden)
- Ambulante Therapie
- Herstellung Züripharm

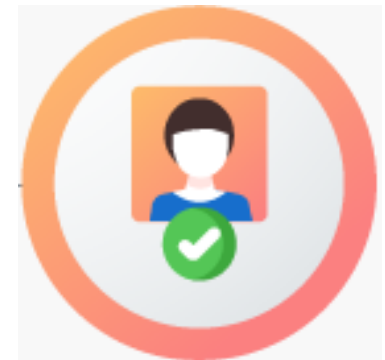


- Funktioniert mit Druck
- Max. Volumen 270ml
- Infusionsrate 10ml/h
- Anwenderfreundlich

Take home message

Improving PICC management practices is essential for minimizing complications and ensuring patient safety during healthcare delivery.

Dobrescu, A. et al. (2025).



Kontakt

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