

Dokumentasjon av litteratursøk

Prosedyrens tittel eller arbeidstittel	Filtrering av injeksjons- og infusjonsvæsker til barn eHåndbok - Filtrering av injeksjons- og infusjonsvæsker til barn (ous-hf.no)
Kontaktdetaljer prosedyremakere	Anette Ronæs Sollie ansol@ous-hf.no
Bibliotekar som utførte eller veiledet søket	Marie Isachsen UiO Medisinsk bibliotek Ullevål sykehus marie.isachsen@ub.uio.no
Dato for søk:	3. juni 2022

Database/kilde	The Cochrane Library (delbasen: Cochrane Database of Systematic Reviews)
Søkehistorie	Søkt i tittel, abstrakt, keywords: (filter* OR filtrat*) AND ("in-line" OR inline OR (intravenous NEAR/2 line*) OR infusion* OR parenteral*)
Treff:	Intravenous in-line filters for preventing morbidity and mortality in neonates Cochrane Database of Systematic Reviews 2015 http://dx.doi.org/10.1002/14651858.CD005248.pub3

Database/kilde	Ovid Medline
Søkehistorie og treff	Database(s): Ovid MEDLINE(R) ALL 1946 to May 19, 2022 1 Filtration/ 2 (filter* or filtrat*).ti. 3 or/1-2 4 Administration, Intravenous/ or Infusions, Intravenous/ or Injections, Intravenous/ 5 Infusions, Parenteral/ 6 Pharmaceutical Preparations/

Dokumentasjon av litteratursøk

7 Parenteral Nutrition Solutions/
 8 Parenteral Nutrition/
 9 Catheterization, Central Venous/ or Catheterization, Peripheral/
 10 Drug Contamination/
 11 (in-line or intravenous* or infusion* or parenteral* or inline filt* or inline intravenous filt*).ti.
 12 (in-line or intravenous line).ab.
 13 or/4-12
 14 3 and 13
 15 limit 14 to humans
 16 limit 15 to (danish or english or norwegian or swedish)
 17 limit 16 to yr="2014 -Current"

Gjenfinner 131 artikler pr. 3. juni.

Dersom dere vil se alle søketreffene på nytt, kan dere klikke på denne lenken (må være på UiO/OUS-nettet):

<https://ovidsp.ovid.com/ovidweb.cgi?T=JS&NEWS=N&PAGE=main&SHAREDSEARCHID=5o3Bh5QxgLbt4wzTTcDU4nZONvAvV0u13FPu6YkzV9RD1nTjX1KPwLR2apF2rMoLk>

Fra de 131 artiklene plukket du ut 25 artikler 3. juni, se nedenfor.

De 8 sifrede tallene ved hver referanse er PMID - det unike tallet til artikler i PubMed/Medline.

Finner du noen titler du vil undersøke nærmere, se abstrakt, evt lenke til fulltekst - så kan du taste inn dette tallet inn i søkeboksen til [PubMed](#)

Først, to relevante artikler som forsvant som følge av avgrensning til Humans»:

1. **34139262**

Ayres JD, Mahler HC. Assessing the Utility of In-Line Intravenous Infusion Filters. J Pharm Sci. 2021;110(10):3325-30.

2. **35198221**

Shimoyama S, Takahashi D, Arai S, Asami Y, Nakajima K, Ikeda K, et al. A large amount of microscopic precipitates are inevitably injected during infusion therapy without an in-line filter. Oxf Med Case Reports. 2022;2022(2):omab134.

25 artikler:

1. **33098974**

Bhat RR, Schoenike MW, Kowal A, White C, Rouvina J, Hardin CC, et al. Feasibility and Consistency of Results with Deployment of an In-Line Filter for Exercise-Based Evaluations of Patients With Heart Failure During the Novel Coronavirus Disease-2019 Pandemic. J Card Fail. 2021;27(1):105-8.

2. **27074895**

Chau DF, Vasilopoulos T, Schoepf M, Zhang C, Fahy BG. Syringe Pump

Dokumentasjon av litteratursøk

Performance Maintained with IV Filter Use During Low Flow Rate Delivery for Pediatric Patients. *Anesth Analg.* 2016;123(3):705-14.

3. **33951943**

Chew SY, Lim HY, Ong HA, Vijayan Sannasi V, Wee B, Tan CK, et al. Inferior vena cava filter migration due to guidewire ensnarement during peripherally inserted central catheterisation. *Anaesth Intensive Care.* 2021;49(3):240-1.

4. **25712958**

Foinard A, Perez M, Barthelemy C, Lannoy D, Flamein F, Storme L, et al. In Vitro Assessment of Interaction Between Amino Acids and Copper in Neonatal Parenteral Nutrition. *JPEN J Parenter Enteral Nutr.* 2016;40(6):827-34.

5. **35537001**

Gill M, Hirsch A, Wilson N. Filtering Out the Facts: Recommendations to Optimize Performance of In-Line Filters for Parenteral Nutrition and Injectible Lipid Emulsion Infusions. *J Infus Nurs.* 2022;45(3):137-41.

6. **29570861**

Guenter P, Worthington P, Ayers P, Boullata JI, Gura KM, Marshall N, et al. Standardized Competencies for Parenteral Nutrition Administration: The ASPEN Model. *Nutr Clin Pract.* 2018;33(2):295-304.

7. **34197649**

Huston RK, Christensen JM, Mohamed SM, Minc L, Sawyer T, Stout KN, et al. High particle counts in neonatal parenteral nutrition solutions with added cysteine: Relationship to crystal formation and effect of filtration on cysteine content. *JPEN J Parenter Enteral Nutr.* 2022;46(3):583-91.

8. **24816873**

Jonckers T, Berger I, Kuijten T, Meijer E, Andriessen P. The effect of in-line infusion filtering on in-line pressure monitoring in an experimental infusion system for newborns. *Neonat Netw.* 2014;33(3):133-7.

9. **25868995**

Kennedy RA, Kennedy ML, Morrissey H, Ball PA. In vitro analysis of the effect of in-line 1.2 micron filters on two formulations of propofol (2,6-diisopropyl phenol). *PDA J Pharm Sci Technol.* 2015;69(2):297-306.

10. **32669738**

Lee S, Bulsara KR. Assessing the Efficacy of Commercially Available Filters in Removing Air Micro-Emboli in Intravenous Infusion Systems. *J Extra Corpor Technol.* 2020;52(2):118-25.

11. **34547476**

Moghbel MC, Chen Z, Liu CM, Rajan S, Vempaty HT, Wang SL. Thrombotic Risk Associated with Inferior Vena Cava Filter Placement in Patients with Heparin-Induced Thrombocytopenia. *J Vasc Interv Radiol.* 2021;32(12):1629-34.

12. **33768303**

Negrier L, Martin Mena A, Lebuffe G, Odou P, Genay S, Decaudin B. Strategies to prevent drug incompatibility during simultaneous multi-drug infusion in intensive

Dokumentasjon av litteratursøk

care units: a literature review. Eur J Clin Pharmacol. 2021;77(9):1309-21.

13. **25196921**

Ng H, Patel RP, Bruno R, Latham R, Wanandy T, McLean S. Filtration of crushed tablet suspensions has potential to reduce infection incidence in people who inject drugs. Drug Alcohol Rev. 2015;34(1):67-73.

14. **29769547**

Perez M, Decaudin B, Abou Chahla W, Nelken B, Storme L, Masse M, et al. Effectiveness of in-Line Filters to Completely Remove Particulate Contamination During a Pediatric Multidrug Infusion Protocol. Sci Rep. 2018;8(1):7714.

15. **33150845**

Ronsley R, Jacques L, Potts JE, Clement K, Dix DB, Mahon P. Association between in-line filtration and Type I hypersensitivity reactions in pediatric oncology patients receiving intravenous etoposide. Pediatr Hematol Oncol. 2021;38(3):208-15.

16. **25845941**

Sasse M, Dziuba F, Jack T, Koditz H, Kaussen T, Bertram H, et al. In-line Filtration Decreases Systemic Inflammatory Response Syndrome, Renal and Hematologic Dysfunction in Pediatric Cardiac Intensive Care Patients. Pediatr Cardiol. 2015;36(6):1270-8.

17. **31757216**

Schmitt E, Meybohm P, Herrmann E, Ammersbach K, Endres R, Lindau S, et al. In-line filtration of intravenous infusion may reduce organ dysfunction of adult critical patients. Crit Care. 2019;23(1):373.

18. **27181534**

Tanaka H, Ambiru S, Kawaguchi T, Sugita Y, Kawajiri C, Nagao Y, et al. Cessation of In-line Filters in Central Venous Catheters Does Not Significantly Influence the Incidence of Bloodstream Infections and Mortality in a Hospital Hematological Ward. Intern Med. 2016;55(10):1287-92.

19. **33506747**

Van Boxtel T, Pittiruti M, Arkema A, Ball P, Barone G, Bertoglio S, et al. WoCoVA consensus on the clinical use of in-line filtration during intravenous infusions: Current evidence and recommendations for future research. J. 2022;23(2):179-91.

20. **29697508**

Villa G, Chelazzi C, Giua R, Tofani L, Zagli G, Boninsegni P, et al. In-Line Filtration Reduces Postoperative Venous Peripheral Phlebitis Associated With Cannulation: A Randomized Clinical Trial. Anesth Analg. 2018;127(6):1367-74.

21. **31347438**

Villa G, Giua R, Amass T, Tofani L, Chelazzi C, Pinelli F, et al. In-line filtration reduced phlebitis associated with peripheral venous cannulation: Focus on cost-effectiveness and patients' perspectives. J. 2020;21(2):154-60.

22. **32193413**

Dokumentasjon av litteratursøk

	Virlouvet AL, Pansiot J, Toumazi A, Colella M, Capewell A, Guerriero E, et al. In-line filtration in very preterm neonates: a randomized controlled trial. Sci Rep. 2020;10(1):5003. 23. 26556624 Werner BP, Winter G. Particle contamination of parenteralia and in-line filtration of proteinaceous drugs. Int J Pharm. 2015;496(2):250-67. 24. 30059660 Werner BP, Winter G. Expanding Bedside Filtration-A Powerful Tool to Protect Patients From Protein Aggregates. J Pharm Sci. 2018;107(11):2775-88. 25. 33091206 Worthington P, Gura KM, Kraft MD, Nishikawa R, Guenter P, Sacks GS, et al. Update on the Use of Filters for Parenteral Nutrition: An ASPEN Position Paper. Nutr Clin Pract. 2021;36(1):29-39.
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Database/kilde	Nursing Reference Center (filter* OR filtrat*) AND ("in-line" OR inline OR "intravenous line" OR infusion* OR parenteral*): in All text
Søkehistorie og treff:	Ingen relevante treff

Database/kilde	Helsebibliotekets retningslinjebase
Søkehistorie	Sett gjennom emnegrupper Barn og unge, Infeksjon m.fl
Treff	Fant ingen informasjon om in-line filtre her: Intravenøs vedlikeholdsvæske behandling - Pediatriveiledere fra Norsk barnelegeforening - Helsebiblioteket.no 5.9 Parenteral ernæring etter første levemåned - Pediatriveiledere fra Norsk barnelegeforening - Helsebiblioteket.no

Database/kilde	Center for kliniske retningslinjer (DK)
Søkehistorie	Sett gjennom Godkente
Treff	Center for Kliniske Retningslinjer Nationale Infekshygiejniske Retningslinjer for brug af intravaskulære katetre Se Kapittel 3-16: Brug af partikelfiltre https://cfkr.dk/retningslinjer/godkendte-retningslinjer/aktivitet/nationale-infekshygiejniske-retningslinjer-for-brug-af-intravaskulaere-katetre/

Dokumentasjon av litteratursøk

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Database/kilde	NICE Guidance (UK)
Søkehistorie	Inline, in-line, intravenous line
Treff:	Ingen relevante

Database/ressurs:	UpToDate
Søkehistorie og treff	Inline, in-line, intravenous line mm

Har også søkt i følgende kilder uten å finne relevante treff:

Søkeord: filtrering, filter, filtre, filtration, partikkelfiltre mm

[Fagprosedyrer som er godkjent i de enkelte helseforetak på fagprosedyrer.no](#)
[Nasjonale faglige retningslinjer, veiledere, prioriteringsveiledere og pakkeforløp fra Helsedirektoratet](#)
[Socialstyrelsen \(Sve\) - Nationella riktlinjer](#)
[Folkehelseinstituttet - rapporter og trykksaker](#)
[Svemed+](#)

Annet:

Partikkelfilter: Filterstrå/In-line filter, anbefalinger for bruk

I: Veileder for legemiddelhåndtering vedlegg 2

Sykehusapotekene

<https://sykehusapotekene.no/Documents/Partikkelfilter%20Filterstr%C3%A5%20In-line%20filter,%20anbefalinger%20for%20bruk.pdf>

[Hva betyr "in-line" filter? \(relis.no\)](#)

Bruk av filtre

Nasjonalt kompetansesenter for legemidler til barn.

Fullstendig revidert juni 2017, med mindre endringer juli 2018 og desember 2020.

https://www.legemidletilbarn.no/helsepersonell/Documents/Legemiddelveilederen/2_Bruk-av-filtre.pdf